APPENDIX B

CERTIFIED EIR

GILROY SPORTS PARK AND URBAN SERVICE AREA AMENDMENT
(USA 98-03)

CERTIFIED FINAL ENVIRONMENTAL IMPACT REPORT

City of Gilroy
June 7, 1999

Gilroy Sports Park
and Urban Service Area Amendment (USA 98-03)

Certified Final Environmental Impact Report

SCH # 98102079

Planning Commission Hearing: May 6, 1999
City Council Hearing: May 17, 1999
Certified by the Gilroy City Council: June 7, 1999

The Draft EIR and Final EIR Addendum together make up the Certified Final EIR.

Prepared for:

City of Gilroy
7351 Rosanna Street
Gilroy, California 95020
(408) 846-0440
Mr. William A. Headley, Jr.
Facilities and Parks Development Manager

June 7, 1999

Prepared by:

EMC Planning Group Inc.

99 Pacific Street, Suite 155F
Monterey, California 93940
Phone: (831) 649-1799
Fax: (831) 649-8399
E-Mail: emcgroup@emcplanning.com

Gilroy Sports Park
and Urban Service Area Amendment

Final Environmental Impact Report Addendum

SCH # 98102079

Prepared for:

City of Gilroy
7351 Rosanna Street
Gilroy, California 95020
(408) 846-0440
Mr. William A. Headley, Jr.
Facilities and Parks Development Manager

April 1999

Prepared by:

EMC Planning Group Inc.

99 Pacific Street, Suite 155F
Monterey, California 93940
Phone: (831) 649-1799
Fax: (831) 649-8399
E-Mail: emcgroup@emcplanning.com

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1.0 Introduction

The City of Gilroy, acting as lead agency, has determined that the proposed addition of 133.2 acres to its Urban Service Area, approval of a Park Master Plan and phased development of a sports park and related off-site improvements (hereinafter "proposed project") may result in significant adverse environmental effects, as defined by the California Environmental Quality Act (CEQA) Guidelines section 15064. Therefore the City of Gilroy has determined that an environmental impact report (EIR) be prepared to evaluate the potentially significant adverse environmental impacts of the proposed project.

A Draft EIR was prepared, and circulated for public review on February 17, 1999. The public review period ended on April 2, 1999. CEQA Guidelines section 15200 indicates that the purposes of the public review process include sharing expertise, disclosing agency analysis, checking for accuracy, detecting omissions, discovering public concerns and soliciting counter proposals.

The Gilroy Sports Park and USA Amendment EIR Final Addendum (hereinafter "addendum") has been prepared to address comments received during the public review period and, together with the Draft EIR, constitutes the Gilroy Sports Park and USA Amendment Final EIR (Final EIR).

Addendum Overview

The following is a brief overview of the organization of this addendum. It is intended to inform the reader how this document was prepared and presented, and to identify the general contents within.

- **Section 1** contains an introduction to the Final EIR well as this addendum overview.
- **Section 2** contains written comments on the Draft EIR, as well as the responses to those comments. No oral comments were submitted.
- **Section 3** contains a revised summary of the Draft EIR, identifying the changes in the impacts and mitigation measures resulting from comments on the Draft EIR.
- **Section 4** contains the revisions to the text of the Draft EIR resulting from comments on the Draft EIR.

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2.0 Response to Comments

CEQA Guidelines section 15132(c) requires that the Final EIR contain a list of persons, organizations, and public agencies who have commented on the Draft EIR. A list of the correspondence received during the public review period is presented below.

CEQA Guidelines section 15132(b) and 15132(d) requires that the Final EIR contain the comments that raise significant environmental points in the review and consultation process, and written response to those comments. A copy of each correspondence received during the public review period is presented on the following pages. . Numbers along the left-hand side of the letter identify each comment. A response to each comment that raises a significant environmental point is located immediately following the letter. Where required, revisions have been made to the text of the Draft EIR based on the responses to comments, and these are included in Section 4, Changes to the Draft EIR Text.

The following correspondence was received during the 45-day public review period, which ended on April 2, 1999.

1. County of Santa Clara Roads and Airports Department
2. California Regional Water Quality Control Board
3. Santa Clara Valley Water District
4. U.S. Army Corps of Engineers
5. Greenbelt Alliance
6. California Department of Transportation
7. California Department of Conservation
8. Streams for Tomorrow
9. Valley Transportation Authority
10. County of Santa Clara Local Agency Formation Commission

The following correspondence was received after the close of the 45-day public review period.

11. County of Santa Clara Roads and Airports Department

Table A summarizes the significant environmental issues raised in each letter.

TABLE A

Response to Comments Summary by Topic

Draft EIR Topic	Correspondence Number										
	1	2	3	4	5	6	7	8	9	10	11
No Environmental Comment						X					X
Project Description					X						
Policy Consistency					X					X	
Adequacy of Mitigation							X	X			
EIR Uses											
Agricultural Considerations					X		X				
Geology											
Hydrology		X	X	X							
Public Services											
Biology				X	X			X			
Transportation	X								X		
Air Quality											
Noise											
Archaeology											
Aesthetics											
Cumulative Impacts		X									
Alternatives		X			X			X			

Source: EMC Planning Group Inc.

County of Santa Clara

Roads and Airports Department
Land Development Services

101 Skyport Drive
San Jose, California 95110

RECEIVED
MAR 11 1999
Gilroy Planning Div.

1

March 8, 1999

Mr. Bryan Stice
Engineering Division
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

Subject: USA 98-03 – Gilroy Sport Park
Draft Environmental Impact Report

Dear Mr. Stice:

Your Draft Environmental Impact Report dated February 11, 1999 for the subject project has been reviewed. We have the following comments.

1 1. Please submit the Traffic Impact Report (TIR) reference mentioned on Pages 2-47 and 2-48.

2 2. The project needs to analyze Level of Service (LOS) at the intersections of Thomas Road/Santa Teresa Blvd. and Miller Avenue/Santa Teresa Blvd.

3 3. Table 9, Page 2-64 lists the Level of Service (LOS) as "F" for Saturday peak for Phase V., but on Page 2-76 under "Significant Impact" the LOS is listed as "E". Please let us know which one is right.

4 4. The LOS for Phase VI and VII is listed "F', but no analysis is performed.

The delay under Phase V is 45 seconds and it is mitigated by a proposed signal. The delay for Phase VI and VII is 117 seconds. Is any mitigation proposed for these two Phases.

Board of Supervisors: Donald F. Gage, Blanca Alvarado, Pete McHugh, James T. Beall, Jr., S. Joseph Simitian
County Executive: Richard Wittenberg

FXD 3-11-99

Thank you for the opportunity to review and comment on this project. Please call me at 573-2464 if you have any questions.

Sincerely

Raluca Nitescu
Project Engineer

RN:rtj
cc: S. Kandah
File

Response to Letter 1

County of Santa Clara Roads and Airports Department

Raluca Nitescu, Project Engineer. **March 8, 1999**

1. A copy of the transportation impact analysis has been forwarded to the County of Santa Clara Roads and Airports Department.

2. In its response to the Notice of Preparation, the County of Santa Clara Roads and Airport Department requested that two additional intersections be included in the transportation impact analysis. These were the intersection of Thomas Road/Luchessa Avenue and Church Street and the intersection of Thomas Road and Santa Teresa Boulevard.

   The City of Gilroy Engineering Division directed the addition of the intersection of Thomas Road/Luchessa Avenue and Church Street to the transportation impact analysis, and further analysis was performed and included in the Draft EIR.

   The City of Gilroy Engineering Division determined that an analysis of the Thomas Road and Santa Teresa Boulevard intersection was not necessary in the transportation impact analysis. The geometry of this intersection will be improved and signal lights added prior to completion of the first phase of the sports park. These improvements will be built with funding from the City of Gilroy and the developer of the Eagle Ridge residential development. The improvements to this intersection are expected to maintain an acceptable level of service at the intersection with the addition of traffic from the projects included in the cumulative traffic analysis for the sports park.

   The intersection of Santa Teresa Boulevard and Miller Avenue was not identified as an intersection of concern in the County of Santa Clara Roads and Airport Department response to the Notice of Preparation. The City of Gilroy Engineering Division has determined that analysis of this intersection is not necessary because the intersection has a low existing traffic volume and only 25 percent of traffic from the sports park will utilize the intersection. The Engineering Division estimates that fewer than 70 northbound and fewer than 70 southbound trips would be added to this intersection during the weekday PM peak hour, and that fewer than 100 southbound trips and fewer than 100 northbound trips would be added to this intersection during the Saturday peak hour at project build-out. The Engineering Division finds that an obvious capacity exists at this intersection, and that there would be no benefit in including the intersection in the transportation impact analysis.

3. Based on the page references and figures cited, comment 3 refers to the intersection of Monterey Road and Monterey Frontage Road. LOS F as shown in Table 9 on page 2-64 of the Draft EIR is correct. The reference to LOS E on page 2-76 of the Draft EIR has been corrected. Without mitigation, the intersection of Monterey Road and Monterey Frontage Road would incur average delays of 45.6 seconds and operate at LOS F during the Saturday peak hour after the completion of Phase V.

4. Based on the average delay figures cited, comment 4 refers to the intersection of Monterey Road and Monterey Frontage Road. The average delay and LOS figures included in Table 9 are calculated without the implementation of any mitigation measures. With the implementation of mitigation measures proposed to be implemented prior to the completion of Phase IV, (geometry improvements and signalization), the intersection of Monterey Road and Monterey Frontage Road will operate at LOS C or better under project build-out and cumulative conditions.

   Without mitigation, the intersection of Monterey Road and Monterey Frontage Road will operate at LOS F during the Saturday peak hour after the completion of Phase V. The intersection will continue to operate at LOS F during the Saturday peak hour after the completion of Phases VI and VII, with average delays increasing from 45.6 seconds after completion of Phase V to 117.1 seconds after completion of Phases VI and VII.

   With implementation of Mitigation Measure 20 in the Draft EIR, the intersection of Monterey Road and Monterey Frontage Road will operate at LOS C during the Saturday peak hour with an average delay of 18.8 seconds under cumulative conditions.

   Without mitigation, the intersection of Monterey Road and Monterey Frontage Road will operate at LOS D during the weekday PM peak hour after the completion of Phase V. The intersection will operate at LOS F during the weekday PM peak hour after the completion of Phases VI and VII, with average delays increasing from 28.4 seconds after completion of Phase V to 60.0 seconds after completion of Phases VI and VII.

   With implementation of Mitigation Measure 20 in the Draft EIR, the intersection of Monterey Road and Monterey Frontage Road will operate at LOS C during the weekday PM peak hour with an average delay of 16.7 seconds under cumulative conditions.

   Implementation of Mitigation Measure 20 in the Draft EIR will maintain LOS C or better at the intersection of Monterey Road and Monterey Frontage Road during both the weekday PM and Saturday peak hours under project build-out and cumulative conditions.

California Regional Water Quality Control Board
Central Coast Region

ston H. Hickox
Secretary for
Environmental
Protection

Internet Address: http://www.swrcb.ca.gov
81 Higuera Street, Suite 200, San Luis Obispo, California 93401-5427
Phone (805) 549-3147 • FAX (805) 543-0397

Gray Davis
Governor

2

March 11, 1999

RECEIVED
MAR 15 1999
Gilroy Planning Div.

Bryan Stice Planning Department
City of Gilroy, Community Development Department
7351 Rosanna Street
Gilroy, CA 95020

Dear Mr. Stice:

GILROY SPORTS COMPLEX – DRAFT ENVIRONMENTAL IMPACT REPORT, SANTA CLARA COUNTY

Thank you for the opportunity to review and comment on the Draft Environmental Impact Report (DEIR). We understand that the 133.2-acre project involves construction of a 78.4-acre multi-use sports park and 54.8 acres of adjacent, undeveloped parcels. Preliminary plan components for the sports park include:

- Recreational play fields (8 softball diamonds and 4 soccer fields)
- Premier play fields (one 90-foot baseball diamond, two little leagues diamonds and one soccer field)
- Competition play fields (one softball/baseball diamond and one soccer field)
- 8.8-acres of park preserve with volleyball, bocci ball courts, concession/restrooms, family picnic and play area.
- Commercial recreation (indoor soccer, roller hockey, community building, and storage)
- 1043 parking spaces
- Night watch park ranger station
- Infrastructure and facilities needed to support the proposed project

Uvas Creek is located at the project's western boundary and at a portion of the southern boundary. Approximately 1,800 feet of earthen flood control levee protects a portion of the site from Uvas Creek. The levee is set back from the top of the "natural creek bank" by approximately 50 feet. The project proposes to use a 50-foot from top of bank habitat buffer along the length of Uvas Creek.

1 The DEIR concedes that

> *Storm water run-off...could increase the rate of storm water discharge into Uvas Creek and the Pajaro River drainage*

However, the DEIR concludes

> *...during flood flow conditions it is likely that the increase in run-off due to the new impervious surfaces... would be less than significant*

Thus, the DEIR concludes that, overall, stormwater runoff will have a less than significant impact on the environment. We disagree with that conclusion.

Any stormwater runoff increase will allow more water to enter Uvas Creek. Logically, more water in Uvas Creek means that Uvas Creek will more readily flood or contribute to downstream flooding. This is especially significant when cumulative impacts are considered. As you probably know, hydrology and flooding are controversial environmental issues in the Pajaro River Watershed. Flooding of developed areas can result in a myriad of impacts to water quality and likely violate water quality standards contained in our Basin Plan. The DEIR's analysis of stormwater runoff and flooding impacts should acknowledge cumulative impacts and Pajaro River watershed flooding concerns. If cumulative hydrology/flooding impacts are properly considered, we believe the project will exceed the standards of significance and require mitigation.

2 Mitigation measure 2 for surface water quality impacts is unclear. The mitigation measure requires the applicant to submit an "NOI" and detailed engineering plans to our agency for each phase of the project. We assume that the NOI will be for coverage under our general statewide stormwater permit for construction activities greater than five acres. Such a mitigation measure will not address impacts associated with post construction urban runoff.

3 From a water quality perspective, the following alternative project configuration seems more environmentally sound; move the sports park area as far away from Uvas Creek as possible and establish a more natural creek configuration. More open space should be allowed to flood. The following diagram (without the depicted levee) describes a typical natural stream profile:

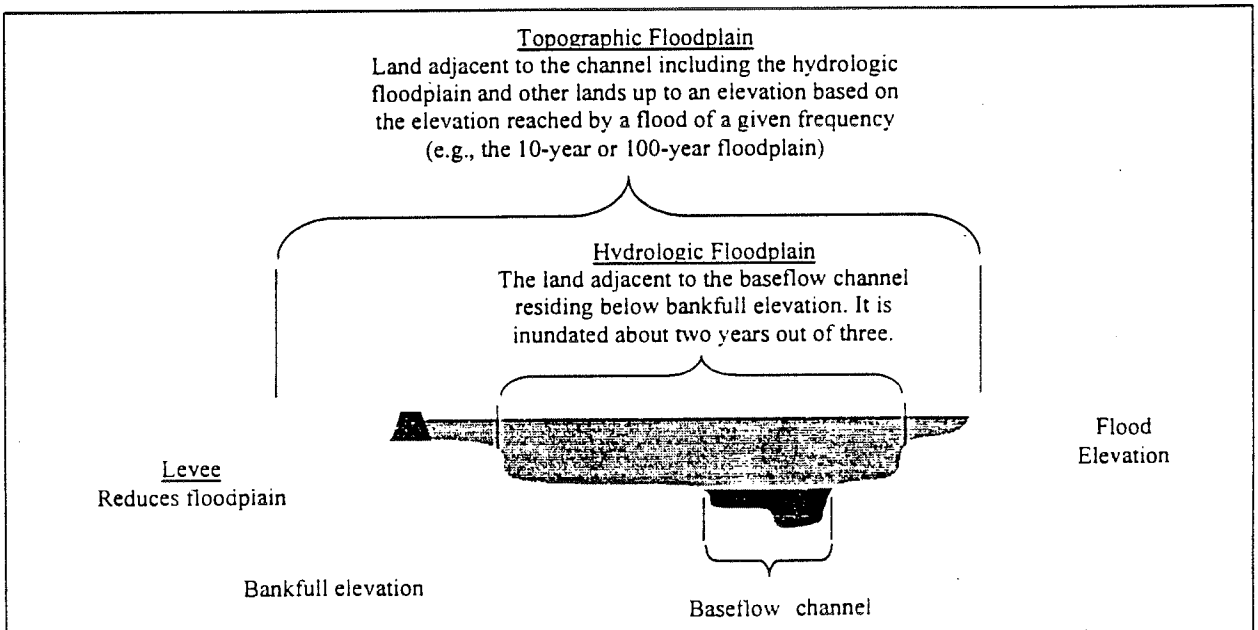

Figure 1 - Hydrologic and Topographic Floodplains

The project provides a rare opportunity to restore a creek segment. Creek restoration would alleviate and partially mitigate greater flood concerns, improve water quality and provide for a truly functional riparian habitat. The Regional Board strongly condones a project redesign to allow for a proper stream restoration. Clearly, the project's 54.8 acres of undeveloped land provides some flexibility to restore some natural stream functions. An authoritative reference for stream restoration can be found at http://www.usda.gov/stream_restoration

2

The DEIR states that the Uvas Creek trail 50-foot riparian habitat buffer will provide a beneficial impact. That buffer will be planted with native grasses and native shrub and riparian understory vegetation. While the proposed project may be an improvement to existing conditions (dirt road and agricultural lands), it is not necessarily the best practical riparian improvement. "Riparian" is defined[1] as "of, pertaining to, situated, or dwelling on the bank of a river or other water body". As shown DEIR Figure 14, the proposed plantings will occur beyond the "top of bank". The DEIR states that "the general slope of the site is away from Uvas Creek towards Monterey Road." Thus the proposed riparian habitat buffer area appears to drain away from the creek bank. Under a typical natural creek configuration, land terraces and drainages slope towards a creek. Considering the above, from a water quality perspective, there appears to be a more environmentally sound project. The final EIR should evaluate our suggested alternative.

We hope the above comments help to produce a superior project. If you have any questions, please call **Tom Kukol at (805) 549-3689**.

Sincerely,

for Roger W. Briggs
Executive Officer

TJK\H:\CEQA\S-CLARA\EIR\Gilroy Sports Park Comments.doc
Task: 121-01
Agency File: Gilroy

[1] The Random House College Dictionary, Revised Edition, 1984

Response to Letter 2

California Regional Water Quality Control Board

Roger W. Briggs, Executive Officer March 11, 1999

1. It is commonly accepted that impervious and pervious surfaces have similar run-off rates during 100-year storm events (because the soil is saturated and there is no percolation occurring). However, during more frequent but less intense storm events there may be a greater difference in the amount of storm water run-off from pervious and impervious surfaces. This is consistent with the analysis contained in the Draft EIR. The Draft EIR does not specifically differentiate between storm water run-off rates during 100-year storm events compared to storm events of lesser magnitude, but does note that there is less difference in run-off rates from pervious and impervious surfaces under "flood conditions" than under non-flood conditions. At the direction of the project hydrologist, the description of storm water run-off in the Draft EIR has been revised.

   Two major factors come into play in determining the effects of storm water run-off on down-stream flooding: run-off rate and lag time. Rainfall intensity and the percolation rate of the surface influence the run-off rate. Lag time is the time that elapses between peak rainfall and peak flow in a channel. This is influenced by distance, terrain and flow interruptions such as dams.

   The percolation rate is the rate at which water is absorbed into the ground. Each type of ground surface has a characteristic percolation rate. When the ground becomes saturated, no more percolation occurs and any excess water drains on the surface. During periods of heavy rainfall, it is common for the ground to become saturated. When ground with a pervious surface becomes saturated and there is no percolation occurring, run-off rates equal those of impervious surfaces. Therefore during periods of major rainfall the run-off rate is essentially the same for any type of surface. Vegetation can influence the percolation rate by "detaining" water before it drains down onto the soil. Vegetation can also impede the flow of water across the surface after the soil becomes saturated.

   Lag time is a measure of the delay between the time of peak rainfall, and therefore peak run-off, and the time of peak flow in the channel at a specific location. It represents the travel time for the flow down the channel system to a specific location.

   Due to the location of the project site within the Uvas Creek watershed, the peak flow in Uvas Creek at the project site occurs hours after the peak

rainfall. Therefore, the site soils would be saturated and the surface storage would be filled by prior rainfall at the time of the peak flows in Uvas Creek. The minimum infiltration capacity for typical soils in the Gilroy area range from 0.05 inches per hour for heavy clays to 0.20 cubic inches per hour for loams. For the proposed project, this represents approximately a 1.0 cubic feet per second difference in runoff, assuming five acres of impervious area and an infiltration rate of 0.20 inches per hour.

On a cumulative basis, the proposed and approved projects include sites in hillside areas with shallow clay soils that would have even lower minimum infiltration capacities than the project site. The potential cumulative impact would be an estimated increase of 10 to 15 cubic feet per second in the peak flood flow. This assumes that there is rainfall in the local area at the time that the peak flood flows occurs in Uvas Creek. This represents less than 0.3 percent increase in the 10-year flood flow of 5,500 cubic feet per second, which does not overflow the channel, and an increase of 0.1 percent in the 100-year flow of 14,000 cubic feet per second. This would not be a significant increase in the flood flows or flood elevations for Uvas Creek.

For downstream areas, including Pajaro River, the potential increases would be even smaller due to the larger existing flows and the extensive flood plain storage in the Soap Lake area downstream of Monterey Road near the Llagas Creek confluence.

2. Mitigation Measure 2 requires the City to submit a Notice of Intent and detailed engineering plans to the Central Coast Water Quality Control Board. This is for the purpose of obtaining a General Construction Permit under the National Pollution Discharge Elimination System Program. Such a permit requires development and implementation of a Storm Water Pollution Prevention Plan. The Storm Water Pollution Prevention Plan will use "Best Management Practices" to prevent storm water run-off both during and after construction.

   It is common that urban pollutants such as coliform bacteria, sediment, organic chemicals, nutrients and pesticides from landscaping and athletic fields, and fuel constituents, heavy metals, oil and grease from automobiles, roads and parking areas enter watercourses through storm or irrigation run-off. A drainage plan for the proposed sports park is being developed by beals group inc. The plan includes a sedimentation basin that will settle out heavy contaminates such as silt before the run-off water is discharged into Uvas Creek. The plan may also include grease separation devices to filter out oil-based contaminants before water is discharged into Uvas Creek. A mitigation measure has been incorporated into the Final EIR to address this issue.

3. CEQA Guidelines section 15126 requires that alternatives be chosen that will minimize any of the significant impacts associated with the proposed project. Water quality impacts would not be reduced or eliminated if the proposed

project were redesigned on the site. The range of alternatives studied in the Draft EIR is adequate under CEQA. The alternative project proposed in this letter would alter the naturally occurring conditions at the project site.

Uvas Creek in the project reach and downstream for a mile or more is a perched channel. This means that the overbank area slopes away from the channel toward Llagas Creek to the east. The channel bank at the northwest corner of the site is approximately eight feet higher than Monterey Road to the east. This is common in California on historic alluvial fans. The silt from channel overflows builds up near the channel until the banks are higher than the overbank areas. Over a long period of time, a perched channel may erode a new more efficient channel along a new route.

For a valley channel section (as shown in the Water Quality Board's figure 1), it may be possible to build on the flood plain fringe, property by property, to create the equivalent of s FEMA floodway. This would leave the flood plain area adjacent to the channel to convey flood flows. However, for a perched channel, restricting the flood flow to the overbank area was the original reason for the flood flowage easement on the project site. The upstream flood control levee increased the depth of flooding on the project site.

A further levee downstream of the existing flood control levee was considered in the Corps of Engineers' design studies. The longer flood control project was not justified by the potential flood control benefits. Any flood control project for the reach would move the potential flood problem downstream, unless the levee extended downstream of U.S, Highway 101 to Llagas Creek.

Redesigning the proposed project to allow more flooding and a "more natural creek configuration" would not be consistent with the natural circumstances of the project site. The existing creek configuration is the natural creek configuration for the project site. The existing riparian corridor is estimated to be approximately 25 feet wide on each side of the creek and is contained within the banks of the creek. The area beyond the top of the bank, such as where the habitat buffer is proposed, is not a riparian habitat but a transitional habitat between the riparian area and the surrounding uplands. This uplands area only occasionally floods. It would not be practical to re-grade the buffer area to drain toward the creek. Any change in the existing channel capacity or channel bank would affect downstream flood conditions.

The proposed project does not include any creek restoration component. The existing stream has not been improved or modified through the project site. The existing channel is in its natural condition. The proposed project has been designed to preserve the existing natural channel. The habitat buffer will be a minimum of 50 feet wide and in many places it will be wider. It will be planted with native grasses and forbs, native shrubs and riparian understory, consistent with the naturally occurring vegetation for the area in

which it is proposed. The habitat buffer is not intended to be restored riparian habitat, but a buffer between the proposed sports park and the existing undisturbed riparian habitat.

Please refer to the response to the second comment in Letter 8 from Streams for Tomorrow for further discussion of the habitat buffer and the beneficial impact of the habitat buffer.

3

Santa Clara Valley Water District

5750 ALMADEN EXPRESSWAY
SAN JOSE, CA 95118-3686
TELEPHONE (408) 265-2600
FACSIMILE (408) 266-0271
www.scvwd.dst.ca.us

AN EQUAL OPPORTUNITY EMPLOYER

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MAR 1-8 1999
Gilroy Planning Div.

March 12, 1999

Mr. Bryan Stice
Community Development Department
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

Dear Mr. Stice:

Subject: Draft Environmental Impact Report (DEIR) for Gilroy Sports Park—USA 98-03

1 Thank you for the opportunity to review the subject document sent to us with your letter dated February 11, 1999. The document adequately addresses development of the Gilroy Sports Park adjacent to Uvas Creek with respect to Santa Clara Valley Water District (District) concerns. The hydrology report, identified as a mitigation measure for on-site flood flowage (page 2-17), is currently being prepared. The City of Gilroy's consultant has contacted District staff and we have discussed preliminary results of the study with no significant concerns to date.

2 While not of direct concern to this project, the District offers the following comments on the analysis and conclusions discussed under the paragraph, "Less than Significant Impact—Storm Water Runoff" on page 2-17. The DEIR states that, during a flood event, site runoff quantities for pervious and impervious surfaces are similar; and, therefore, the increased runoff created from additional impervious surfaces has a less than significant impact. While this contention is commonly accepted for a major event such as a 1 percent flood, the distinction is less clear during more frequent events. Flood plain analyses and flood maps have been prepared for 100-year or 1 percent flood events. Maps have not been prepared for other flooding events, yet we know that flooding occurs in many locations more frequently. During these more frequent events, increases in site runoff from impervious surfaces affect flooding depths and areal coverage. Hence, the DEIR comment should be qualified and recognition should be given to the increased frequency and significance of flooding in areas subject to flooding from events other (more frequent) than the 1 percent flood. As a side note, it is this condition that contributes to increased high flows on a more regular basis and subsequent erosion in many of our streams.

I can be reached at (408) 265-2607, extension 2253.

Sincerely,

Sue Tippets

Sue A. Tippets, P.E.
Supervising Engineer
Community Projects Review Unit

recycled paper

Response to Letter 3

Santa Clara Valley Water District

Sue A. Tippets, P.E. **March 12, 1999**

1. The comment regarding the present preparation of the hydrology report is noted. The hydrology report will address the flood constraints on the project site and the potential changes to the sheetflow across the project site during overflows from Uvas Creek. In order to avoid potential adverse impacts, the project site grading will maintain existing overflow elevations from the creek, maintain existing flow paths across the project site and limit increased flood elevations on the project site. These measures will avoid potential adverse impacts for off-site locations.

2. Please refer to the response to the first comment in Letter 2 from the California Regional Water Quality Control Board. At the direction of the project hydrologist, the description of storm water run-off in the Draft EIR has been revised.

DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, CORPS OF ENGINEERS
333 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94105-2197

4

REPLY TO
ATTENTION OF:

Regulatory Branch

MAR 1 9 1999

FAXED TO EMC.

RECEIVED
MAR 2 2 1999
Gilroy Planning Div.

SUBJECT: File No. 24283S

Mr. Bryan Stice
City of Gilroy
Community Development Department
7351 Rosanna Street
Gilroy, California 95020

Dear Mr. Stice:

Your request for comments on the Draft Environmental Impact Report concerning the Gilroy Sports Park in Gilroy, Santa Clara County, California was received on March 3, 1999 by your notice dated February 11, 1999.

All proposed discharges of dredged or fill material into waters of the United States must be authorized by the Corps of Engineers pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344). Waters of the United States generally include tidal waters, lakes, ponds, rivers, streams (including intermittent streams), and wetlands.

1 Your proposed work for the pedestrian/bicycle bridge over Uvas Creek appears to be within our jurisdiction and a permit may be required. Application for Corps authorization should be made to this office using the application form in the enclosed pamphlet. To avoid delays it is essential that you enter the file number at the top of this letter into Item No. 1. The application must include plans showing the location, extent and character of the proposed activity, prepared in accordance with the requirements contained in this pamphlet. You should note, in planning your work, that upon receipt of a properly completed application and plans, it may be necessary to advertise the proposed work by issuing a public notice for a period of 30 days.

If an individual permit is required, it will be necessary for you to demonstrate to the Corps that your proposed fill is necessary because there are no practicable alternatives, as outlined in the U.S. Environmental Protection Agency's Section 404(b)(1) Guidelines. A copy is enclosed to aid you in preparation of this alternative analysis.

4

If you have any questions, please call Mr. Clyde Davis at telephone 415-977-8449. Please address correspondence to Regulatory Branch, and refer to the file number at the head of this letter.

Sincerely,

Edward A. Wyle

for Calvin C. Fong
Chief, Regulatory Branch

Enclosure

Response to Letter 4

U.S. Army Corps of Engineers

Calvin C. Fong, Chief, Regulatory Branch **received March 22, 1999**

1. Any project that might have an adverse impact on federally protected wetlands as defined by Section 404 of the Clean Water Act requires a permit from the U.S. Army Corps of Engineers. Construction of a bicycle and pedestrian bridge over Uvas Creek is proposed as part of the sports park development, and may result in a discharge of soil or other materials into the creek. The Draft EIR anticipates that a Section 404 permit may be required for the bridge construction. Mitigation Measure 9 requires that the City contact the U.S. Army Corps of Engineers to ascertain whether Uvas Creek qualifies as a federally protected wetland. If Uvas Creek is a federally protected wetland, as suggested in the Corps' comment letter and therefore under their jurisdiction, then the City will be required to obtain a Section 404 permit in compliance with the Clean Water Act.

Greenbelt Alliance
PEOPLE FOR OPEN SPACE

PROTECTING THE GREENBELT FOR OVER FORTY YEARS 40 1998

RECEIVED
APR 1 1999
Gilroy Planning Div.

April 1, 1999

Bryan Stice
City of Gilroy Community Development Department
Planning Division
7351 Rosanna Street
Gilroy, CA 95020

RE: USA 98-03 - Gilroy Sports Park Draft Environmental Impact Report

Dear Mr. Stice:

Greenbelt Alliance appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) on the proposed Gilroy Sports Park (Planning File USA 98-03). Greenbelt Alliance strongly supports Gilroy's desire to provide adequate recreational and athletic opportunities for its children and other residents. However, we do have some concerns with the adequacy of the environmental document as well as the potential impacts of the project as proposed. We are particularly concerned with potential adverse impacts related to conversion of prime agricultural land.

I

The Project Description is Unclear and Inadequate for the Purposes of CEQA

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As an initial matter, both review of the DEIR and analysis of the potential impacts of the proposed project are significantly complicated by the document's lack of consistency in terms of what constitutes "the project" for the purposes of environmental review under the California Environmental Quality Act (CEQA). Page S-1 of the DEIR describes "the project" as a 133.2 acre urban service area (USA) amendment. However, a subsequent sentence appears to attempt to limit "the project" to a 78.4 acre portion of the aforementioned 133.2 acres: "The sports park is the only project proposed for development at this time within the Urban Service Area amendment request." For the purposes of environmental analysis, the DEIR seems to treat "the project" as solely the 78.4 acre Sports Park. With the exception of a brief mention of eventual conversion of prime agricultural land on the entire 133.2 acres, the discussion of environmental impacts and mitigation measures provided in the DEIR are generally limited to the Sports Park component.

MAIN OFFICE • 530 Bush Street Suite 303, San Francisco CA 94108 • (415) 398-3730 • Fax (415) 398-6530
SOUTH BAY OFFICE • 1922 The Alameda Suite 213, San Jose CA 95126 • (408) 983-0539 • Fax (408) 983-1001
NORTH BAY OFFICE • 520 Mendocino Avenue Suite 225, Santa Rosa CA 95401 • (707) 575-3661 • Fax (707) 575-4275
EAST BAY OFFICE • 1372 North Main Street Suite 203, Walnut Creek CA 94596 • (510) 932-7776 • Fax (510) 932-1970
email: greenbelt@igc.apc.org • web site: www.greenbelt.org

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CEQA Guidelines Section 15124 require that a DEIR include a project description and California case law makes clear that an agency cannot provide multiple conflicting project descriptions in different areas of a document. See *County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185; *County of Inyo v. Yorty* (1973) 32 Cal App. 3d 795; *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818. Shifting project descriptions are not allowed because they are confusing and interfere with the public ability to understand and participate in the CEQA process; in the words of *the County of Inyo* Court, an "unstable project description draws a red herring across the path of public input." 71 Cal.App.3d at 197-198. The court in *Santiago* specifically addressed the situation where certain elements of the full project were not discussed in the EIR: "Because of this omission, some important ramifications of the proposed project remain hidden from view at the time the project was being discussed and approved. This frustrates one of the core goals of CEQA". *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818, 830.

2 The Gilroy Sports Park DEIR should be revised to ensure a clear and consistent project description. If the project is a 133.2 acre urban service area expansion, then the document should identify, analyze, and provide mitigation for, the potential impacts associated with buildout of this entire area. Otherwise, the City of Gilroy should limit its USA expansion request to the 78.4 acres necessary for the currently proposed project - the Sports Park.

II

The DEIR Should be Revised to Include Full Discussion and Analysis of the Impacts of a 133.2 acre USA Expansion.

Although the City of Gilroy's immediate goal is to build a Sport Park on a portion of the site, the City cannot ignore or defer analysis of the environmental consequences of bringing an additional 55 acres into its Urban Service Area. It is settled case law that CEQA requires environmental documents to address reasonably foreseeable future phases of a project. *Laurel Heights Improvement Association of San Francisco v. Regents of the University of California* (1988) 47 Cal. 3d 376, 396.

Nor can the City avoid analyzing the impacts of the full USA expansion simply by stating that the additional 55 acres are not proposed for development at this time. DEIR at 1-9. Under State law, a city's USA reflects the area beyond the existing boundary that is expected to receive urban services within the next five years. Gov't Code Sect. 56080. Including an additional 133.2 acres within Gilroy's USA, would, without question, increase development pressure on the entire 133.2 acres and not merely the 78.4 acres

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for which the City currently has a specific plan. The DEIR should be revised (and recirculated for additional public comment) to address the full range of potential impacts associated with the 133.2 acre USA expansion including, but not limited to, traffic impacts, biological impacts, air and water quality impacts, growth inducing impacts, etc...

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III

The USA Expansion Request Should Be Limited to the 78.4 Acres Needed for the Proposed Sports Park.

Alternatively, the City could revise its project description to clearly indicate that the proposed project is a 78.4 acre USA expansion for the purpose of building a Sports Park. As support for its request to annex 55 acres over and above the 78.4 acres proposed for the Sports Park, the DEIR states: "in an effort not to create an 'island', the city has included the adjacent parcels to the north and east in the Urban Service Area amendment request." DEIR at 1-9. The City's reluctance to allow the additional 55 acres to remain outside of the USA appears to be loosely premised on LAFCo and Santa Clara County policies generally favoring compact and contiguous forms of development. However, these policies are designed to protect open space and prime agricultural land and promote sound land use planning and should not be applied, as here, to justify unnecessarily converting prime agricultural land. The DEIR should be revised to include a full discussion and analysis of the necessity and rationale for including the additional 55 acres rather than simply relying on a brief conclusory statement about avoiding an "island".

Because the proposed use of the 78.4 acres is not a high intensity urban development but instead a very low intensity recreational facility, the proposed Sports Park could be compatible with continued agricultural production on the adjacent 55 acres. Limiting the USA expansion request to the land that is actually needed for the Sports Park would significantly lessen the project's adverse impact on prime agricultural soils; reducing the loss of prime farmland by 40%. It is particularly important to eliminate unnecessary conversion of agricultural land in this project because, as the DEIR acknowledges, the farmland that would be converted contains soil that is "considered to be the most productive soil in the Santa Clara Valley..." DEIR at 2-2 (emphasis added). At the very least, the DEIR should be revised to include a project alternative that is limited to a 78.4 acres USA expansion to allow consideration of this option.

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IV

The DEIR Should be Revised to Identify the Project's Inconsistency with LAFCo and Santa Clara County Land Use Policies.

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Section 1.5 of the Gilroy Sports Park DEIR addresses Consistency with Local and Regional Plans. Unfortunately, this Section repeatedly confuses economic feasibility and the comparative merit of alternative sites with assessment of the environmental impacts of the proposed project. As a result, the DEIR does not include an accurate description of the project's potential impacts as required by CEQA. The DEIR makes clear the reason for the proposed location - the fact that it is located within an area subject to a flood flowage easement made it financially feasible for the City to acquire this site. Ultimately, fiscal realities may trump other site selection criteria when this project gets to the decisionmaking stage, however, financial preferability does not confer consistency with agency land use policies. State law requires that the DEIR fully disclose the environmental impacts of the proposed project to allow the public an opportunity for meaningful comment. The DEIR should thus be revised to identify the project's inconsistency with several LAFCo and Santa Clara County General Plan policies.

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Under Santa Clara County Growth and Development Policy C-GD 6, prime agricultural soils "shall not be considered suitable for urban development". The Gilroy Sports Park DEIR acknowledges that the proposed project would convert 133.2 acres of prime agricultural land to non-agricultural uses, but determines that the project is consistent with C-GD 6 because there are no project alternatives that would not affect agricultural soils. This conclusion cannot be supported. The fact that all of the proposed alternatives would be inconsistent with C-GD 6 may be relevant to a decisionmaker forced to assess the relative merit of various options but it does not somehow confer consistency upon the proposed project. The DEIR language should be revised to conclude that the project is not consistent with C-GD 6.

Santa Clara County Growth and Development Policies C-GD 7 and C-GD 8 address the issue of premature conversion of land. The DEIR states that the project is consistent with these provisions because alternative land is not available within existing boundaries. According to the DEIR, "Land within Gilroy's Urban Service Area is expected to be substantially developed within five years." DEIR at 1-38, 1-41. However, according to data complied in the context of the ongoing Gilroy General Plan Update, only 48% of the land within the City's existing boundaries is currently developed. The same data suggests that Gilroy will not reach residential buildout for an estimated 22-47 years, commercial buildout for 25-27 years, or industrial buildout for 60-107

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years.[1] It is therefore not accurate to state that the City will be "substantially built out in the next five years". The DEIR should be revised to eliminate this statement and to include a finding that the project is not consistent with C-GD 7 and C-GD 8.

7 Santa Clara County Growth and Development Policy C-GD 9 addresses the jobs/housing balance and range of housing opportunities issues. The DEIR concludes that because the Sports Center will not affect housing and it is not known what use will ultimately be made of the additional 55 acres, the project is consistent with this policy. However, the absence of information about what eventual use will be made of the additional 55 acres cannot justify a conclusion that it will not have a future impact. The DEIR should be revised to state that, with respect to the additional 55 acres, it is not known whether the proposed project is consistent with Policy C-GD 9.

8 LAFCo Urban Service Area Amendment Policies 5 , 6 address the issue of efficient land use, and the necessity and timing of USA expansion. See discussion of C-GD 7 and C-GD 8 above.

9 Finally, to the extent that the City is not able to develop a project that is entirely consistent with existing County and LAFCo land use policies, these inconsistencies could, apparently, be minimized by limiting the USA expansion request to 78.4 acres. The DEIR should be revised to analyze this alternative.

V

The DEIR Should Discuss Mitigation Options for Conversion of Prime Agricultural Land.

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The Gilroy Sports Park DEIR concludes that the project will result in an unavoidably significant loss of prime agricultural. CEQA Section 21002.1 requires agencies to "mitigate or avoid the significant effects on the environment of project ... whenever it is feasible to do so." Although an agency may ultimately approve a project in spite of unavoidable significant impacts by adopting a statement of overriding considerations, this does not obviate the requirement that impacts be mitigated to the greatest extent feasible.

The Sports Park DEIR should be revised to include analysis of minimizing the impacts to prime agricultural soils by reducing the USA expansion request and/or by adopting an agricultural land conversion mitigation program such

[1] This figure includes the 1979 urban reserves.

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as the City of Davis' Farmland Mitigation Program or the South Livermore Valley Area Plan. These programs require that any conversion of agricultural land to nonagricultural uses be mitigated through permanent protection of agricultural land elsewhere in the region. Such program offer a viable system for effectively mitigating the longterm and cumulative impacts of urbanization in areas of prime farmland.

VI

The DEIR Should be Revised to Include a More Substantial Riparian Setback.

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Greenbelt Alliance supports the proposed extension of Uvas Creek Trail to Gavilan Community College. However, development of the trail as well as the creation of a large Sports Park immediately adjacent to Uvas Creek will doubtless increase the amount of human and domestic animal visitation to this section of the riparian corridor. While we appreciate that the proposed project will not result in any loss of habitat and will include a re-vegetation component that should actually improve existing conditions in the area, it remains critical that the Creek is protected by a generous buffer to protect riparian habitat value and wildlife. The DEIR states that the Uvas Creek Trail would be setback at minimum fifty (50) feet from the top of bank. We strongly urge you to increase this setback to one hundred (100) feet to insure adequate protection of this important riparian area.

VII

Conclusion

Thank you for your consideration of these comments. Please do not hesitate to contact me at 983-0539 if you have any questions.

Sincerely,

Kaitilin Gaffney
South Bay Field Representative

Response to Letter 5

Greenbelt Alliance

Kaitilin Gaffney, South Bay Field Representative April 1, 1999

1. The proposed project is described in the first three paragraphs of the Draft EIR summary on page S-1 and in the Draft EIR introduction on pages 1-2 through 1-20. The project is clearly described as consisting of an urban service amendment request consisting of approximately 133 acres, sports park development (on approximately 78 of the 133 acres) and off-site improvements, including roadway improvements, extension of the Uvas Creek Trail and extension of a recycled water distribution line. The sports park project would include overlaid soccer and softball fields, playgrounds, picnic grounds and a commercial recreation area. The project vicinity map on page 1-5 of the Draft EIR illustrates the entire project site, as well as the sports park portion of the project site. The majority of the project site is currently designated as OPEN SPACE in the *City of Gilroy General Plan,* with the exception of a small area that is designated PARK/PUBLIC FACILITY.

   The environmental impact analysis in the Draft EIR is generally limited to the sports park development and development of related off-site improvements because other portions of the project site are proposed to retain the existing OPEN SPACE land use designation.

2. An EIR is not required to analyze those impacts that are purely speculative (CEQA Guidelines section 15145). In *Laurel Heights Improvement Association v. Regents of the University of California* the court noted that where future development is unspecified and uncertain, no purpose could be served by requiring an EIR to engage in sheer speculation as to future environmental consequences.

   With a current general plan designation of OPEN SPACE, and without any proposals to change that, the only foreseeable impact of bringing the additional land into the Urban Service Area is the loss of prime agricultural land, based on an eventual loss at an unknown time in the future. It is impossible to provide a meaningful evaluation of potential environmental impacts at that portion of the site without any information on which to base an analysis. The Draft EIR includes the eventual loss of prime agricultural land as a significant and unavoidable impact both on the sports park site where current development plans exist, and on the remaining parcels where no development plans exist, because any type of urban development would result in this impact. The project site is located within the City of Gilroy's

existing 20-year growth boundary and it can be expected that the land will be developed at some point in the future.

CEQA requires environmental analysis of all reasonably foreseeable future phases of a project. Existing agricultural uses are expected to continue indefinitely on all but the sports park site, and the sports park site itself is expected to be developed over a 20-year timeframe with much of the sports park site remaining in agricultural use for many years. The Draft EIR addresses all phases of the sports park development through its anticipated completion in approximately 20 years.

The continuation of agriculture will have no environmental impacts beyond the existing or "no project" conditions. To predict the type or extent of potential impacts related to public services, transportation, air quality, noise, or aesthetics from future development on land designated OPEN SPACE would be extremely speculative and result in a meaningless environmental document. CEQA Guidelines section 15145 does not require analysis of impacts that are too speculative for evaluation.

Urban development on the parcels in question would require a general plan amendment and zoning change and therefore additional environmental review, as stated on page S-1 of the Draft EIR. This additional environmental review will rely on proposed general plan amendments and/or development plans and will yield meaningful information for the public and the decision-makers. If the proposed project included a general plan amendment for the subject parcels (such as residential, commercial, industrial or public facility), build out of the parcels could be evaluated in the environmental document.

3. An alternatives analysis of a project that includes only the sports park site in the Urban Service Area amendment request, would be meaningless as an alternative because it would provide no additional analysis beyond that already contained in the Draft EIR. Except for the extent of the loss of agricultural land, all impacts associated with this alternative would be the same as for the proposed project studied in the Draft EIR. Analyzing this alternative would provide no new information to the public or to the decision-makers.

   However, should the decision makers choose to limit the Urban Service Area amendment to the sports park site only, this EIR would be adequate for the environmental review necessary to make that decision.

4. The Draft EIR fully discusses all environmental impacts of the proposed project and the alternative sites. The City's choice of the project site for its proposed sports park is an economically based decision that also makes sensible use of an area prone to flooding. While the City purchased the project site for use as a sports park largely because the land's location in a flood plain reduced its market value, this was not a factor in the

environmental analysis of the project. The environmental analysis in the EIR is based upon the environmental factors at the project site and the alternative sites.

All of the alternative sites identified would result in the loss of prime agricultural land. Although two of the alternative sites would result in a smaller loss of agricultural land than the proposed project, these two sites would also result in greater traffic impacts. The third alternative site would result in a loss of agricultural land that was determined to be approximately equal in impact to the proposed project.

Consistency of the proposed project with several of the LAFCO and Santa Clara County policies has been revisited. Please refer to the responses to Letter 10 from the Santa Clara County Local Agency Formation Commission.

5. Please refer to the response to the fourth, fifth and sixth comments in Letter 10 from the Santa Clara County Local Agency Formation Commission regarding Santa Clara County Growth and Development Policies C-GD6, C-GD7 and C-GD8.

6. The two sets of figures are not comparable. The Draft EIR refers to the amount of land remaining to be developed within the City's Urban Service Area. The comment refers to the amount of undeveloped land contained within the General Plan planning area. The Urban Service Area is an officially established area that is expected to receive urban services within an approximate 5-year time frame. The General Plan planning area is not an officially adopted area, but rather an area surrounding the City for which the City wishes to formulate long term policies. The City's Urban Service Area is much smaller than the General Plan planning area, and the additional land is almost entirely undeveloped. Therefore citing a figure for remaining developable land that refers to this much larger area and comparing it to figures for the Urban Service Area is not valid.

7. Santa Clara County Growth and Development Policy C-GD9 is intended to assure that an adequate housing supply is available within a city that is adding land to its Urban Service Area for the purpose of expanding employment. The addition of the proposed project to Gilroy's Urban Service Area is not for the purpose of expanding employment. The only project proposed for development is the sports park, and this project will result in only a small number of jobs. The remaining land will remain in agricultural use for an indefinite period of time. The purpose of this Urban Service Area amendment request is not to expand employment within the City.

   Comments on LAFCO Urban Service Area Amendment Policy 5 are addressed in the response to comments on Santa Clara County Growth and Development policies C-GD6, C-GD7 and C-GD8 in the response to the letter from the Santa Clara County Local Agency Formation Commission.

8. Please refer to the response to the second comment in Letter 10 from the Santa Clara County Local Agency Formation Commission.

9. Please refer to the response to the third comment in this letter.

10. Please refer to the response to Letter 7 from the California Department of Conservation.

11. Please refer to the response to the second comment in Letter 8 from Streams for Tomorrow.

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY GRAY DAVIS, Governor

DEPARTMENT OF TRANSPORTATION
P. O. BOX 23660
OAKLAND, CALIFORNIA 94623-0660
TELEPHONE (510) 286-4444
FAX (510) 286-5513

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March 30, 1999

R E C E I V E D
2 1999
Gilroy Planning Div.

SCL-101-5.26
SCL101599
SCH #98102079

Mr. Bryan Stice
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

Dear Mr. Stice:

Gilroy Sports Park and Urban Service Area Amendment: Draft Environmental Impact Report (DEIR).

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for this project. We have examined the above-mentioned DEIR and would like to offer the following comment:

1 All maps should be to scale and should contain sufficient detail so that the State right-of-way can be identified and potential impacts assessed. In trying to ascertain the possible effects of the project in terms of hydrology issues, we did not have adequately detailed information. Although we eventually obtained a map that enabled us to conduct a thorough review, it was not included in the document.

We appreciate the opportunity to be involved in this project. If you have and questions or concerns, please contact Abbe Hoenscheid of my staff at (510)622-1643.

Sincerely,

HARRY Y. YAHATA
District Director

By: Jean CR Finney

JEAN C.R. FINNEY
District Branch Chief
IGR/CEQA

Response to Letter 6

California Department of Transportation

Harry A. Yahata, District Director March 30, 1999

1. The comment is noted. The comment does not raise any environmental issues and no response is necessary.

State of California

The Resources Agency

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MEMORANDUM

RECEIVED
APR 7 1999
Gilroy Planning Div.

To: Project Coordinator
Resources Agency

Date: April 1, 1999

✓ Mr. Bryan Stice
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

From: **Department of Conservation**
Office of Governmental and Environmental Relations

Subject: Draft Environmental Impact Report (DEIR) for Gilroy Sports Park and Urban Service Area Amendment (USA 98-01) **SCH # 98102079**

The Department of Conservation's Division of Land Resource Protection (Division) has reviewed the above referenced DEIR. The Division maps and monitors farmland conversion on a statewide basis, and administers the California Land Conservation (Williamson) Act and Agricultural Land Conservation Program. We commented on the Notice of Preparation for this project in a letter of November 20, 1998. We offer the following additional comments for your further consideration.

1 The DEIR provides a thorough discussion of the agricultural impacts, the project's setting, and alternative project locations. Additionally, the DEIR discusses the establishment of the Gilroy Agricultural Lands Area as partial mitigation for the agricultural land conversion impact of the project. However, the statement of overriding considerations is not supported by a finding that the city considered a reasonable range of feasible mitigation measures or alternatives to avoid or reduce to less than significant this impact [Public Resources Code Section 21081(a)(3)]. If additional measures or alternatives were considered, the finding should include information on why they were not considered feasible. In particular, the DEIR should at least consider the use of agricultural land conservation easements, or Williamson Act or Farm Security Zone contracts, for protecting other viable agricultural lands threatened by urbanization. In a 1997 unpublished decision, the court directed the lead agency to consider conservation easements as a legitimate means of mitigation of land conversion impacts (El Toro Land Use Planning Authority, et al v. County of Orange, et al, San Diego Superior Court #710123, October 28, 1997).

Thank you for the opportunity to review the DEIR. If you have questions on the above comments, or need information or technical assistance, please contact the Division at 801 K Street, MS 13-71, Sacramento, CA 95814; phone (916) 324-0850.

We would be glad to assist you with examples of agricultural land conservation easement agreements, as well as with information on nearly 30 agricultural land conservation tools used by other local jurisdictions.

Jason Marshall
Assistant Director

cc: John Amodio, Chief
Division of Land Resource Protection

Loma Prieta RCD
8010 Wayland Lane, Suite 1D
Gilroy, CA 95020

Response to Letter 7

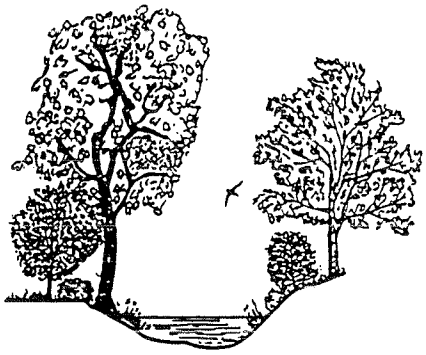
California Department of Conservation

Jason Marshall, Assistant Director April 1, 1999

The City generally agrees with the concept of agricultural conservation measures and is receptive to conservation plans. The City may enter into conservation agreements for land that it owns, or it may negotiate with private landowners, typically as mitigation for environmental impacts of proposed projects or as conditions of approval of proposed projects for the greater public benefit. The City recently negotiated an 1,800-acre conservation easement in the area west of Santa Teresa Boulevard in conjunction with approval of the Eagle Ridge Subdivision. The City will implement such measures when the City Council establishes that as a priority.

The City could consider the use of agricultural land conservation easements, Williamson Act contracts or Farm Security Zone Contracts for mitigation of the loss of agricultural land at the project site. In order for the City to implement one of these conservation strategies for the proposed project, the City would have to purchase an appropriate amount of land on which to implement the conservation plan. This may not be an economically and/or socially feasible approach.

SANTA CLARA COUNTY
STREAMS FOR TOMORROW
Post Office Box 1409
San Martin, California 95046



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April 1, 1999

Mr. Bryan Stice
Planning Division
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

Dear Mr. Stice:

Draft Environmental Impact Report
Gilroy Sports Park and Urban Service Area Amendment
(USA 98-01); Dated February 1999

We have the following comments and recommendations for your consideration regarding subject Draft Environmental Impact Report (DEIR).

1 I. The DEIR is legally inadequate because it does not adequately discuss alternatives to the proposed project.

Every DEIR must describe a range of reasonable, feasible alternatives to the project, or to the location of the project, which would feasibly attain the project's basic objectives with reduced environmental impact, and must evaluate the comparative merits of each alternative. (Pub.Res.Code Sections 21002, 21100(a)(4); CEQA Guidelines Section 15126.6(a)). A proper analysis of alternatives ensures the City's compliance with CEQA's mandate to avoid or substantially lessen significant environmental damage where feasible. (Pub.Res.Code Section 21002; CEQA Guidelines Sections 15002(a)(3), 15021(a)(2), 15126.6(b). An alternative is a form of mitigation.

The flaw in the DEIR's alternatives analysis is its failure to identify and consider a reasonable range of potentially feasible alternatives, as CEQA requires. (CEQA Guidelines Section 15126.6(a)). A feasible alternative is one which can be accomplished in a successful manner within a reasonable period of time, taking into account economic, legal, social and technological factors. Citizens of Goleta Valley v. Board of Supervisors, (1990) 52 Cal. 3d at 574. Among the factors that may be taken into account when determining the feasibility of an alternative is "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site." (CEQA Guidelines Section 15126.6(f)(1)).

Since the City concludes that "Alternative sites were not available at a price affordable to the City" (DEIR, page 3-2), the off-site alternatives described in the DEIR are infeasible as a matter of law. Therefore, the DEIR is fundamentally flawed because it fails to analyze a range of feasible alternatives, as CEQA mandates.

Nor does the DEIR identify any on-site alternatives despite the fact that significant effects of the project on biological resources could be substantially lessened by alternative project designs, setbacks, and siting of facilities. Alternatives need not be identical nor even substantially similar to the project as originally described as long as they would attain the project's basic objectives with reduced environmental impact.

The DEIR should be revised to include an analysis of a range of feasible alternatives -- preferably both off-site and on-site alternatives -- pursuant to CEQA Guidelines Section 15126.6(c). It is our opinion the alternatives analysis as presented in the DEIR would not survive judicial review.

2 II. The DEIR is legally inadequate because it does not adequately disclose nor analyze some significant environmental impacts, nor does it discuss sufficient mitigation measures.

1. As an independent action, establishing the proposed Uvas Creek riparian buffer would be a beneficial impact. However, in the context of analyzing and mitigating project impacts, the buffer constitutes partial mitigation to reduce direct and indirect human-induced adverse impacts to wildlife caused by the public use of the Sports Park. Use of these facilities will adversely disturb and dislocate sensitive wildlife species in the adjacent riparian corridor. The buffer will provide partial mitigation for this long-term unavoidable impact.

It is misleading and erroneous to refer to this mitigation measure as a "Beneficial Impact", particularly when the Department of Fish and Game -- the Trustee Agency for wildlife resources -- states "We do not consider the 50-foot buffer mentioned in the NOP to be adequate to protect this riparian corridor." (November 17, 1998 letter of response to NOP).

The DEIR fails to adequately evaluate the long-term impacts of Sports Park use on the general assemblage of riparian corridor wildlife species. CEQA requires that an EIR must not only identify probable project impacts, but also provide "information about how adverse the impacts will be." Santiago County Water District v. County of Orange (1981) 118 Cal.3d.818,831. The revised DEIR must correct this deficiency by evaluating such impacts and identifying mitigations (which should include the proposed buffer).

Because both construction and public use of the Park facilities will adversely impact riparian wildlife, it is imperative that any buffer be established in Phase I of the Project to maximize the mitigative benefits of the buffer. The revised DEIR should reflect this need.

3 2. Construction of a pedestrian bridge over Uvas Creek is identified as a potential significant impact. However, Mitigation Measure Number 8 defers the identification of mitigation to a future Streambed Alteration Agreement between the City and Department of Fish and Game.

Any proposed mitigation measures to avoid or reduce significant adverse impacts that a project may have on the environment must be made available

for public review at the time the DEIR is circulated for public review and comment. Mitigation measures cannot be left to be formulated in the future. (Gentry v. City of Murrieta, (1995) 36 Cal.App.4th at 1397).

Relying upon the presumed success of future mitigations in the form of regulatory agency conditions of approval that have not been formulated at the time the DEIR is circulated for public comment constitutes illegal deferral of mitigation identification. (Sundstrom v. County of Mendocino, (1988) 202 Cal.App.3d 296, 306-314).

The revised DEIR must identify specific mitigation measures to avoid or reduce impacts on Uvas Creek aquatic habitats and biological resources. For example, the DEIR could identify that (1) all in-channel work shall occur only between June 1 and October 15; (2) Streamflow shall be diverted around the work site and discharged in a non-erosive manner; (3) Construction and removal of water diversion facilities, as well as other construction activities, shall be conducted without increasing stream turbidity more than 50 Nephelometric Turbidity Units above background levels; and (4) Equipment shall not be operated in the live stream.

III. Conclusion

Given that analysis and mitigation of environmental impacts are at the heart of CEQA, the project will not comply with CEQA until the deficiencies described above are remedied. Therefore, the DEIR must be revised to (1) provide a proper alternatives analysis; (2) evaluate the long-term impacts of Sports Park use on riparian wildlife species, with identification of appropriate mitigation; and (3) provide specific mitigation measures to avoid or minimize the impacts of bridge construction on Uvas Creek. The DEIR should not be certified until the deficiencies discussed above have been fully addressed and corrected in a revised DEIR.

Please send us a copy of your Response to Comments document, revised DEIR, and notices of public hearings. When they become available, please also send us the mitigation monitoring and reporting program required per Pub.Res.Code Section 21081.6 and the City's draft mandatory CEQA findings document.

Thank you for the opportunity to provide comments on subject DEIR. If you have questions about our comments and recommendations, please contact me at the letterhead address or telephone (408) 683-4330 (voice and fax).

Sincerely,

Keith R. Anderson

Keith R. Anderson
Environmental Advocate

cc: Mr. Jeffrey Lawson
Attorney at Law
Reed, Elliott, Creech & Roth

SCCSFT Reading File

Response to Letter 8

Streams for Tomorrow

Keith R. Anderson, Environmental Advocate **April 1, 1999**

1. The commentor has paraphrased CEQA Guidelines section 15126.6(a). The actual text of this section of the guidelines is presented here to assist with responding to this comment.

   This section states, "An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason."

   CEQA Guidelines section 15126.6(f)(1) further discusses the feasibility of alternatives. This section states "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives." Therefore, while a number of factors are presented for consideration in determining the feasibility of an alternative, the alternative need not meet all of the stated criteria to be considered feasible.

   In determining the "reasonable range of potential feasible alternatives", City staff and the EIR consultant focused on those alternatives that would "avoid or substantially lessen the significant effects of the project". All of the significant impacts identified in the Draft EIR can be reduced to a less than significant level with the exception of the loss of prime agricultural land. Therefore, the selection of alternatives was focused on alternative locations that would avoid or lessen the impacts on agricultural land. A redesign of

the project at the proposed site would not reduce the impacts associated with the proposed project, as mitigated.

City staff in consultation with the EIR consultant identified the alternative locations. These locations were identified because they are entirely or partially, located within the City's existing Urban Service Area and are therefore, already anticipated for development in the foreseeable future. This was the City's attempt to select alternatives that would substantially lessen the significant effect regarding the loss of prime agricultural land. Each of the alternative locations identified could "feasibly attain most of the basic objectives of the project", as well as "substantially lessen" the impacts associated with the loss of prime agricultural land.

The City of Gilroy purchased the project site because it is located in a flood plain where many other uses are not possible based on conditions of the Army Corps of Engineers levee contract. Therefore, the land was available for a lower price than equivalent land elsewhere in or near the City. The City took advantage of this opportunity and wants to establish a sports park. While the alternative sites could command a considerably higher price than the project site due to their suitability for other urban uses, the City Council could allocate sufficient funds to purchase one of these sites if this were determined to be a necessary expenditure and the economic and social consequences were deemed acceptable. Therefore, the alternative sites selected and analyzed are considered reasonable and would "feasibly attain most of the basic objectives of the project" and therefore, are adequate under CEQA.

The EIR does not state that "the City concludes that alternative sites were not available at a price affordable to the City." There are no "conclusions" with respect to the EIR as far as the City of Gilroy is concerned, until the Gilroy City Council certifies the EIR as adequate and makes the appropriate statement of overriding considerations. The EIR does however, state on page 3-1 and 3-2 that "the City of Gilroy *is expected* (emphasis added) to make the following findings regarding the loss of prime farmland prior to approving the project...Alternative sites were not available at a price affordable to the City." If the City Council makes the finding that alternative sites, which may be environmentally superior, are not available at a price affordable to the City, this decision would not render other reasonable alternative sites, infeasible for purposes of evaluation in an EIR. It would be a policy decision based upon the City Council's authority to allocate money for capital expenditures.

Even though the City of Gilroy currently owns the project site, and may not be willing to purchase land already within the existing Urban Service Area, failure to evaluate alternative sites would be contrary to the CEQA statutes and guidelines. The alternatives analysis is adequate.

2. The project site is currently in agricultural use. A dirt farm road separates the cultivated fields from the top of the bank of Uvas Creek in most parts of the project site. In the northern part of the project site the dirt road is on top of a Santa Clara Valley Water District levee and is located a greater distance from the top of the bank. The presence of the farm road and levee provides access to the creek and existing riparian corridor, as is evidenced by trash and the dumping of large objects (i.e., sofas) observed on the bank of Uvas Creek during site investigations conducted during preparation of the environmental document. The narrow width of the existing riparian corridor, and the lack of vegetation between the farm road and creek in some areas, provides direct access to the creek and riparian area.

   The existing riparian corridor is estimated to be approximately 25 feet wide on each side of the creek, with some portions of the creek lacking riparian vegetation. Uvas Creek has very steep banks, with the elevation of the creek bed being far below the elevation of the surrounding uplands. At the project site, a 10-year flood flow will stay within the creek banks, and the surrounding uplands only occasionally flood. Riparian vegetation depends upon soil moisture from a nearby freshwater source. The steepness of the banks and depth of the channel limit the amount of soil moisture that is available to adjacent vegetation and, therefore, contributes to the narrow width of the existing riparian corridor. Further, the narrowness of the existing corridor and its proximity to active agricultural operations does not provide a dense, secluded wildlife habitat.

   The proposed project includes a minimum 50-foot wide "habitat buffer", not specifically a riparian buffer, because the most distant portion of the buffer will not receive significant soil moisture from Uvas Creek. The habitat buffer area will transition from native grasses near the proposed pedestrian trail (farthest from Uvas Creek), to native shrubs and riparian understory vegetation near Uvas Creek where riparian vegetation can be supported. Given the existing topography of the site (i.e., gradual slope away from Uvas Creek), it would be impractical to establish a 50-foot buffer consisting entirely of riparian species. Instead, the goal of the proposed habitat buffer is to restore native vegetation to the area adjacent to Uvas Creek, and promote riparian vegetation in those areas adjacent to Uvas Creek that can support riparian species. Restoration and enhancement of native vegetation along Uvas Creek and expansion of the habitat buffer area along Uvas Creek will increase the value of the riparian habitat for wildlife. In several places the habitat buffer will be much wider than the minimum 50 feet. (Also refer to the response to the third comment in Letter 2 from the Regional Water Quality Control Board regarding the natural slope away from the creek.)

   Development of the sports park and the Uvas Creek pedestrian trail will introduce more people to the area than the existing farm road. However, the design of the habitat buffer, which includes native shrubs and riparian understory vegetation between the pedestrian trail and the riparian corridor

and creek, will create a vegetative barrier between the pedestrian trail and creek. This vegetative barrier will discourage people from entering the habitat buffer, especially if the native vegetation planted in the habitat buffer includes spiny plants (i.e., gooseberry, California rose) or irritant plants (i.e., poison oak, stinging nettle). The slope of the creek bank is very steep and would be difficult to climb in most places. As directed by Mitigation Measure 19 in the Draft EIR, signage will be placed along the pedestrian trail to discourage entry of people and their pets. Also, the vast majority of park users will be engaged in sports activities and will not be wandering into the habitat buffer area.

The project as designed and mitigated, including the pedestrian trail and habitat buffer, will not result in significant impacts to the riparian corridor. The minimum 50-foot habitat buffer included in project plans is sufficient to protect the riparian corridor and to enhance the wildlife values of the riparian habitat and, therefore, is a beneficial impact.

3. Three mitigation measures are proposed for the mitigation of the potentially significant environmental impacts of constructing a bicycle and pedestrian bridge across Uvas Creek. The first of these mitigation measures requires the City to obtain the Section 1603 Streambed Alteration Agreement from Fish and Game. Two additional mitigation measures require the City to contact the Army Corps of Engineers to determine if a Section 404 permit is required for discharge into the waters of the United States, and to install siltation fencing or other erosion control measures to prevent erosion during construction.

   The Section 1603 Streambed Alteration Agreement is an appropriate mitigation measure. While CEQA prohibits deferral of the formulation of mitigation measures to a later time, it specifically allows mitigation measures to specify performance standards that would reduce the significant adverse environmental effects of the project to a less than significant level (CEQA Guidelines section 15126.4 (B)). The Section 1603 Streambed Alteration Agreement sets appropriate standards for the mitigation of the potential biological resources impacts that are identified for the construction of the bicycle and pedestrian bridge over Uvas Creek. Two performance standards are included in the mitigation measure. These include a stipulation that all construction work take place when the creek is either dry or the creek flow very low, and that if any water is flowing, that the flow be diverted into an open gravel-lined bypass channel for the duration of the work. Additional requirements of the Section 1603 Streambed Alteration Agreement will be determined by the California Department of Fish and Game. The mitigation measure requiring a Section 1603 Streambed Alteration Agreement and setting forth these performance standards is appropriate under CEQA.

SANTA CLARA
Valley Transportation Authority

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APR 6 1999
Gilroy Planning Div.

9

April 2, 1999

City of Gilroy
Department of Community Development
7351 Rosanna Street
Gilroy, CA 95020-6141

Attention: Bryan Stice, Planner I

Subject: Gilroy Sports Park Draft Environmental Impact Report

Dear Mr. Stice:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the Draft Environmental Impact Report (DEIR) for the development of a sports park to accommodate a variety of activities at the southwest corner of Thomas Road and Highway 101. VTA comments follow, and are separated into *Transit Service* and *Congestion Management Program* issues to reflect our dual role in reviewing the project.

Transit Service

1 On Page 2-51, the DEIR states that a "sidewalk is provided along the north side of Thomas Road-Luchessa Avenue between Monterey Street and Princevalle Street to the north of the project."

To allow patrons of the project to safely and conveniently access existing and future transit services in the area, VTA staff recommend that the City also consider providing a sidewalk along the south side of Thomas Road.

2 As noted in VTA's November 20, 1998 letter regarding the Notice of Preparation of a DEIR for this project, VTA staff are still considering the possibility of bringing bus service to the sports park. Please continue to forward information about this project to VTA for review and comment. VTA staff will work with City and project staffs on this possibility.

Congestion Management Program

3 The Transportation Impact Analysis (TIA) section of the DEIR conforms to the Congestion Management Program's guidelines.

We appreciate the opportunity to review this project. If you have any questions, please call Lauren Bobadilla of my staff at (408) 321-5776.

Sincerely,

Thomas Rountree
Environmental Program Manager

TDR:LGB:kh

Response to Letter 9

Valley Transportation Authority

Thomas Rountree, Environmental Program Manager **April 2, 1999**

1. The comment is noted. At some time in the future the City may consider the necessity of adding a sidewalk on the south side of Thomas Road/Luchessa Avenue. The sports park is expected to take 20 years to complete, however, and at this time it does not appear that a sidewalk on the south side of Thomas Road would provide any benefit not already provided by existing and/or planned pedestrian paths.

2. The comment is noted. The comment does not raise any environmental issues, however, and no response is necessary.

3. The comment is noted. The comment does not raise any environmental issues, however, and no response is necessary.

County of Santa Clara

Local Agency Formation Commission

County Government Center, East Wing
70 West Hedding Street, 10th Floor
San Jose, California 95110
(408) 299-2424 FAX 295-1613
Autumn Arias, Executive Director

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APR 7 1999

Gilroy Planning Div.

10

April 2, 1999

Bryan Stice, Planner
Community Development Department
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

Re: USA 98-01 Gilroy Sports Park Draft Environmental Impact Report

Dear Mr. Stice: Bryan

Thank you for the opportunity to review the **Gilroy Sports Park and Urban Service Area Amendment** Draft Environmental Impact Report. The Santa Clara County Local Agency Formation Commission (LAFCO) has the following comments regarding the DEIR. While the document generally does a good job of discussing the environmental issues, including a good analysis of the alternative sites to the proposed project, there are some incorrect conclusions regarding the consistency of the project with the following LAFCO and County plans and policies:

1

- **Page 1-40, Consistency with LAFCO Urban Service Area Amendment Policy 4:**
  Urban Service Area Amendment Policy 4: LAFCO will consider factors such as the following to determine the local and regional impacts of a proposed Urban Service Area amendment:

  e. Whether the conversion of agricultural and other open space lands is premature, or if there are other areas into which to channel growth;

The document discusses each section of the policy and states, "The proposed project is **consistent** with this policy." Policy 4-e is discussed as follows: "The proposed project would result in the conversion from agricultural use of the proposed 78.4-acre sports park site. The remaining parcels would remain in agriculture at this time. The alternate sites are currently in agricultural use and they would be removed from agricultural use if they were developed for a sports park."

While the proposed project is consistent with most of Policy 4, it is **not consistent** with Policy 4-e. The sports park site would be removed from agricultural production, and the additional 54.8 acres would become vulnerable to development pressure. Furthermore, alternative sites exist within the urban service area. Whether or not the alternative sites would also convert prime agricultural land is not relevant to consistency with this policy. In particular, inclusion of the

additional acreage into the urban service area is premature as there is no planned development at this time.

2 • **Page 1-42, Consistency with LAFCO Urban Service Area Amendment Policy 6:**
The Commission will discourage Urban Service Area expansions which include agricultural or other open space land unless the city has accomplished one of the following:

a. Demonstrated to LAFCO that effective measures have been adopted for protecting the open space status of the land. Such measures may include, but not be limited to, establishment of agricultural preserves pursuant to the California Land Conservation Act; adoption of City/County use agreements or applicable specific plans; implementation of clustering or transfer-of-development-rights policies; evidence of public acquisition; or

b. Demonstrated to LAFCO that conversion of such lands to other than open space uses is necessary to promote the planned, orderly efficient development of the city.

The document states: "The sports-park land has been acquired by the City of Gilroy for public open space use. The existing open space designation of the remaining parcels would not change at this time. When those parcels are developed, development would be orderly, and compatible with surrounding urban uses. The Study of the South County Agricultural Preserve was a joint effort of Santa Clara County, the City of Gilroy and Santa Clara County LAFCO. The study established an area of approximately 15,800 acres to the east and south of Gilroy as an agricultural preserve. The proposed project is located outside of the agricultural preserve on land that is within the City of Gilroy's 20-year growth area. The proposed project is **consistent** with this policy."

The project is **only partially consistent** with this policy. The proposal consists of 133.2 acres of prime agricultural land. While it is true that the proposed urban service expansion area lies outside of the "Gilroy Agricultural Lands Area," the City is requesting that 133.2 acres be added to the urban service area, rather than just the 78.4 acre area needed for the sports park. Inclusion of the additional 54.8 acres into the urban services area is not needed in order to make the sports park contiguous to the existing urban service area.

If there is an assumption that the adjacent parcels would not be developed in the short term, they should not be included in the urban service area. Even if it is felt that more contiguity to the urban service area is desirable than just the width of a roadway (which would be the case if only the sports park parcels are taken into the USA), the option exists to include substantially less than 54.8 acres of additional land. The low-intensity land use of a sports park would be highly compatible with continued surrounding agricultural uses. Inclusion of additional land into the urban service area for which no project is planned at this time is not necessary to promote the planned, orderly efficient development of the City.

3 • **Page 1-35, Consistency with Growth and Development Policy C-GD 1:**
Growth and Development Policy C-GD 1: Most of the future urban growth of Santa Clara County should be accommodated within the existing urban areas, through infill development, rather than expansion of the urbanized area into hillsides and resource areas.

The document states: "The proposed project would expand growth into an area that contains prime farmland, a valuable resource. However, the land is contiguous with developed portions of the City of

Gilroy, and is adjacent on two sides to developed land. The proposed project is **consistent** with this policy."

This proposal is **not consistent** with this policy. It is not within the existing Urban Service Area (USA) or the existing city limits, and therefore cannot be considered as infill development.

4 • **Page 1-37, Consistency with Growth and Development Policy C-GD 6:**
Growth and Development Policy C-GD 6: Hazard and resource areas with the following characteristics shall be considered unsuited for urban development:

e. prime agricultural soils.

The document discusses each section of the policy and states: "The proposed project would convert prime farmland to nonagricultural uses over a projected development period of 20 years. No alternative site was identified that would not result in the conversion of prime agricultural land. The proposed project is **consistent** with this policy."

The proposed project is **not consistent** with this Policy C-GD 6 e. The proposed project would convert 133.2 acres of prime farmland to an urban use. Whether or not the alternative sites would also convert prime agricultural land is not relevant to consistency with this policy. Furthermore, the alternative sites are already totally or partially within the urban service area.

5 • **Page 1-37, Consistency with Growth and Development Policy C-GD 7:**
Growth and Development Policy C-GD 7: Urban expansion should be planned on a staged, orderly basis, consistent with applicable plans (e.g. city, County, countywide plans) and the availability of needed urban services and facilities. The discouragement of expansion of cities' Urban Service Areas should be recommended to the LAFCO."

The document states, "The project site is currently within the City of Gilroy planning area and is within the city's 20-year development boundary. The proposed sports park is expected to be built in a staged and orderly basis in phases over a 20-year period. The proposed project is **consistent** with this policy."

The proposed project is **not consistent** with this policy. There are areas that are currently inside the urban service area of the city of Gilroy large enough to accommodate this proposal. In particular, the inclusion of 54.8 acres of additional land into the urban service area that is not needed for the sports park cannot be considered to be orderly development.

6 • **Page 1-37, 1-38, Consistency with Growth and Development Policy C-GD 8:**
Growth and Development Policy C-GD 8: Proposals to annex land or expand a city's urban service area boundaries shall be approved only if:

b. the existing supply of land within the city's USA accommodates no more than five years of planned growth;

The documents discusses each policy section and states: "The proposed project is **generally consistent** with this policy." Policy C-GD b. is discussed as follows: "Land within Gilroy's

Urban Service Area is expected to be substantially developed within five years. Most of the land remaining within the Urban Service Area is designated for residential and commercial use. Suitable sites for the sports park use are very limited. Two of the studied alternate locations are located within the Urban Service Area, and one alternate location is partially within the Urban Service Area.

Land within Gilroy's existing Urban Service Area is expected to be substantially built within five years. The proposed project requires a large amount of land. Though three alternative sites were found within (or partially within) the existing Urban Service Area, these were considered to be less suitable than the project site. Because the project site is located in a flood zone, the City was able to purchase the land at cost that makes the proposed project feasible. The alternative sites are not located in a flood zone and do not have the economic advantage that the project site has. The alternative sites were not as contiguous to developed land as the project site and two of the alternative sites were likely to have significant traffic impacts. Refer to Section 3.5 Alternatives."

The proposal is **consistent** with portions a. and c. of this policy and is **not consistent** with Policy C-GD b. Lands within the urban service area are not likely to be developed within a five year time frame, especially lands that are suitable for the proposed sports park.

7 • In closing, it is important to comment on potential changes to the Gilroy General Plan as they relate to this proposal. The Gilroy General Plan update process is still underway and will be finalized close to the time of LAFCO's consideration of this project. If elements of the new General Plan change to the extent that they are relevant to this proposal, LAFCO will require additional information in order to adequately review the proposal. At that time, it will need to be determined if supplemental environmental documentation and review will be necessary, or if supplemental information to the commission will suffice. This has been previously discussed with Gilroy staff, who preferred this option over waiting until the General Plan update was adopted before beginning environmental work on this proposal.

Of particular interest to LAFCO will be whether the land use designations of the 133.2 acre project site and the alternative sites will change under the new General Plan, and whether the eastern growth boundary delineating the "Gilroy Agricultural Lands Area" east and south of Gilroy will be upheld.

Again, thank you for the opportunity to comment on the **Gilroy Sports Park and Urban Service Area Amendment** Draft Environmental Impact Report. I can be reached at (408) 299-3800 x7027 if you have any questions regarding these comments.

Sincerely,

Autumn H. Arias
Executive Director

Response to Letter 10

County of Santa Clara Local Agency Formation Commission

Autumn Arias, Executive Director **April 2, 1999**

1. LAFCO Urban Service Area Amendment Policy 4e states that LAFCO should consider "whether the conversion of agricultural and other open space lands is premature, or if there are other areas into which to channel growth. Three alternative sites identified in the Draft EIR were determined to be adequate to accommodate the sports park project. Two of these alternative sites would result in reduced agricultural impacts if the proposed project were built there instead of at the project site. None of the alternative sites identified would eliminate the agricultural impacts altogether. However the loss of agricultural land could be reduced from approximately 133 acres to approximately 80 acres through the use of the alternative sites. Excluding the additional project site parcels (those outside the sports park site) from the project would have the same effect. Since there are other sites of adequate size, and notwithstanding the other environmental impacts associated with those sites, there are other areas in which to channel the proposed "growth". Additionally the proposed project could be reduced in size to achieve this same goal. Therefore, it is acknowledged that the proposed project is **inconsistent** with LAFCO Urban Service Area Amendment Policy 4e and the text of the EIR has been amended to reflect this.

2. The 54.8 acres of non-sports park land are proposed to retain their existing land use designation of OPEN SPACE. Although the City assumes that these parcels would not be developed in the short term, including them in the Urban Service Area provides for a more contiguous Urban Service Area. The City acknowledges the possibility that once in the Urban Service Area, development pressures on these parcels may increase. The City also acknowledges that the option exists to bring less than 54.8 acres of additional land into the Urban Service Area.

3. Santa Clara County Growth and Development Policy C-GD 1 specifically states that "*Most* (emphasis added) of the future urban growth of Santa Clara County should be accommodated within the existing urban areas... "While the proposed project is located adjacent to urban development on two sides, it is acknowledged that the proposed project cannot be considered to be an in-fill project. Although the proposed sports park could be loosely defined as an "urban" development, the nature of a sports park is significantly lower in intensity that that of most residential, commercial, and industrial projects. The proposed project is considered to be consistent with this policy.

4. Santa Clara County Growth and Development Policy C-GD 6e states that areas of prime agricultural soils are unsuitable for urban growth. Although all of the alternative sites identified in the Draft EIR would also result in development on prime agricultural soils, it is acknowledged that this fact does not lessen the significance of the loss of prime agricultural soils that would occur on the project site with development of the proposed project.

   It appears that any development on prime agricultural soils would be inconsistent with this policy. Therefore, it is acknowledged that the proposed project is **inconsistent** with Santa Clara County Growth and Development Policy C-GD 6e, and the text of the EIR has been amended to reflect this.

5. Santa Clara County Growth and Development Policy C-GD 7 requires urban expansion to be planned in a staged, orderly basis and consistent with applicable plans and the availability of urban services and facilities. The policy discourages the expansion of urban service areas.

   The proposed project will result in the orderly development of the City of Gilroy. The proposed project is located closer to substantial utility infrastructure and is more contiguous with existing development than the alternative sites that were identified. The project site is also closer to existing major transportation nodes. Therefore the proposed project is consistent with the first part of this policy.

   The City acknowledges that the proposed project is inconsistent with the second part of this policy. The discouragement of expansion of the City's Urban Service Area is not recommended because the City planning staff believes that the project site is superior to alternative sites in terms of proximity to existing development, utility infrastructure, transportation facilities and lodging facilities. The sports park is expected to generate a substantial amount of traffic, and a location near major transportation facilities is considered very important. The nearby location of lodging facilities will decrease the number of trips somewhat during regional events since out-of-town participants staying at the lodgings will be able to easily reach the facility on foot. The project site is adjacent to development on two sides. None of the alternative sites have this proximity to existing development.

   This policy was challenging to interpret and initially, it appeared that the consistency analysis was adequate. On second review, it would appear that the proposed project is only consistent with the first part of the policy. Therefore, the proposed project would be **consistent** with the first part of Santa Clara County Growth and Development Policy C-GD 7 but it is acknowledged that the proposed project would be **inconsistent** with the second part of the policy. The text of the EIR has been amended to reflect this.

6. The City of Gilroy expects that most of the land within its existing Urban Service Area will be substantially developed within an approximate 5-year timeframe. The three alternative sites that were studied in the Draft EIR are located within or partially within the Urban Service Area. However, these sites were found to be less suitable than the project site for the proposed sports park. The sites, though within the existing Urban Service Area, are less contiguous to existing development than the project site. The utility and transportation infrastructure at these alternative sites is not as good as at the project site. The City believes that the project site is superior to the alternative sites within the existing Urban Service Area. While it is true that these sites might not be developed within the next five years, the City believes that no equally suitable site for the proposed project exists within the current Urban Service Area. Therefore, given the constraints of the of the proposed project's land requirements, the proposed project is consistent with this policy.

7. CEQA Guidelines require an EIR to discuss consistency with applicable plans. CEQA Guidelines section 15125 (d) requires an EIR to "discuss any inconsistencies between the proposed project and applicable general plans and regional plans." This section includes a list of the types of plans and policies typically included in the analysis. CEQA Guidelines section 15125 (e) requires that "where a proposed project is compared with an adopted plan, the analysis shall examine the existing physical conditions at the time the notice of intent is published" as well as "the potential future conditions discussed in the plan." The Environmental Checklist Form (CEQA Guidelines Appendix G) asks whether the project would "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."

   CEQA makes no requirement that a project be analyzed for consistency with future plans that have not yet been formulated. The City of Gilroy General Plan update is still in the hands of the working committee and no official proposals have been put forth. The update has not yet been released for public review, much less adopted by the City. Any analysis of the upcoming General Plan update would be highly speculative and not required by CEQA.

County of Santa Clara

Roads and Airports Department
Land Development Services

101 Skyport Drive
San Jose, California 95110

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Gilroy Planning Div.

11

April 6, 1999

Mr. Bryan Stice
Community development Department
City of Gilroy
7351 Rosanna Street
Gilroy, California 95020

Subject: Draft Environmental Impact Report (EIR)
Traffic Impact Analysis
Gilroy Sports Park

Dear Mr. Stice:

In response to Item (2) of our November 23, 1998 letter, the City furnished us the Traffic Impact Analysis (TIA) dated January 1999 concerning the subject project. We have reviewed the TIA and our comments are as follows:

1 According to figure 6 of the TIA, 30% of the project traffic is directed to Santa Teresa Blvd./Thomas Road intersection.

In the December 15, 1998 letter by Kristi A. Abrams, P.E., Traffic Engineer, City of Gilroy, it is stated as follows:

> "The Thomas Road/Santa Teresa Expressway intersection will be geometrically improved and signalized prior to the first phase of the Gilroy Sports Park. Funded in part by the Eagle Ridge developer and part by the City of Gilroy, these improvements are anticipated to be completed as early as summer of 1999 and no latter than summer 2000. The first phase of the Gilroy Sports Complex will not open until summer 2002. Therefore, this intersection was not included in the analysis.
>
> The Thomas Road/Church intersection will be added to the analysis."

Board of Supervisors: Donald F. Gage, Blanca Alvarado, Pete McHugh, James T. Beall, Jr., S. Joseph Simitian
County Executive: Richard Wittenberg

11

This is acceptable. A County encroachment permit should be obtained prior to the beginning of any work in the County jurisdiction.

We thank you for the opportunity to review this matter. Please call me at (408) 573-2462 if you have questions.

Sincerely,

Ashok Vyas
Project Engineer

AAV:rtj
cc: DEC
MA
JME
File

Response to Letter 11

County of Santa Clara Roads and Airports Department

Ashok Vyas, Project Engineer April 4, 1999

1. The comment is noted. The comment does not raise any environmental issues, however, and no response is necessary.

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3.0 Revised Summary

Proposed Project

The proposed project consists of three primary components: an Urban Service Area amendment request to Santa Clara County Local Agency Formation Commission (LAFCO) and annexation to the City of Gilroy; approval of a Park Master Plan and development of the Gilroy Sports Park and commercial recreation building; and construction of off-site improvements including the extension of the Uvas Creek Trail from Thomas Road—Luchessa Avenue south to Gavilan Community College (including a pedestrian/bicycle bridge over Uvas Creek), extension of the City's recycled water distribution line to the sports park, and roadway improvements.

The project site is located on the south end of Gilroy at the southwest corner of Monterey Street and Thomas Road—Luchessa Avenue. It is bordered by Thomas Road—Luchessa Avenue to the north, Uvas Creek and Farman Lane to the south, Monterey Street and Monterey Frontage Road to the east, and Uvas Creek to the west. Surrounding land uses are residential (single-family and rural), commercial (hotels under construction), and agricultural (row crops and greenhouses). U.S. Highway 101 is located to the east of the project site.

The entire 133.2-acre project site is proposed for inclusion into the City' s Urban Service Area, and annexation to the City. This would include the 78.4-acre sports park site and 54.8 acres of adjacent parcels to the east and north. The sports park is the only project proposed for development at this time within the Urban Service Area amendment request. The adjacent parcels are not proposed for development. This EIR assumes these parcels will remain in open space. Any proposed development on these parcels will require further environmental review.

Preliminary plans for the proposed sports park include the following components: recreational play fields (eight softball diamonds and four soccer fields and concession/restrooms); premier play fields (one 90-foot baseball diamond, two Little League diamonds and one soccer field and concession/restrooms); competition play fields (one softball/baseball diamond and one soccer field and concessions and restrooms); 8.8 acres of park preserve with family picnic, concessions and restrooms, volleyball and bocci ball courts, horseshoe pits and play area; commercial recreation building (indoor soccer, roller hockey, community building, storage); corporation yard; parking (1,043 spaces); and a night watch park ranger station. Soccer fields overlay baseball/softball fields. Football may also be played on the soccer fields. The athletic fields would have lighting for night games, a public address system and seating. The sports park and related off-site improvements would be constructed in phases over a 20-year period.

Summary of Impacts and Mitigation Measures

Pursuant to CEQA Guidelines section 15063 an initial study was prepared to determine the potentially significant effects of the proposed project. The initial study determined that certain issues would have a potentially significant impact on the environment. These issues concerned agricultural considerations, geology, hydrology, public services and service systems, biological resources, transportation/circulation, air quality, noise, archaeological resources, and aesthetics. The initial study determined that there would be a less than significant impact concerning population and housing and energy. Those issues determined to have a potentially significant environmental impact were studied in greater depth in this EIR. Environmental impacts and proposed mitigation measures for the proposed project are presented in Table S-1.

Summary of Other CEQA Considerations

Unavoidable Significant Adverse Environmental Impacts

An unavoidable significant adverse environmental impact is a significant adverse impact that cannot be reduced to a less than significant level through the implementation of mitigation measures. CEQA Guidelines section 15093 requires that a lead agency make findings of overriding considerations for unavoidable significant adverse environmental impacts before approving a proposed project.

The loss of prime farmland is generally considered a significant and unavoidable adverse environmental impact. The proposed project would result in the loss of the 133.2 acres of prime farmland (though some of this land is used for commercial and residential farm-related uses). The establishment of the Gilroy Agricultural Lands Area by both the City of Gilroy and the County of Santa Clara serves as a regional mitigation for losses of prime farmland in southern Santa Clara County, outside of the agricultural lands area. Although this regional mitigation has been implemented, it does not reduce the loss of prime farmland to a less than significant level and the proposed project would still be considered to have a significant and unavoidable impact on prime farmland.

Cumulative Impacts

Cumulative impacts are those environmental impacts resulting from the cumulative effects of approved but not yet built projects and probable projects in the area of the proposed project. Cumulative impacts were based on projects in the southern part of Gilroy. Cumulative impacts were identified concerning agricultural considerations, hydrology, transportation/circulation and air quality.

Agricultural Considerations

The proposed project would add 133.2 acres of prime farmland to the City of Gilroy Urban Service Area. Land within the Urban Service Area is generally expected to be developed within an approximate five-year timeframe. Prime farmland is a non-replaceable resource. Each cumulative project that involves the conversion of prime farmland to non-agricultural uses contributes to the depletion of this resource.

Hydrology

Development of previously undeveloped land results in the covering of permeable soil with impermeable pavement and structures. The proposed project along with other proposed development will result in an increase in the amount of currently permeable land that is covered by impermeable surfaces. Under certain weather conditions increases in the amount of area covered in impervious materials can result in increased rates of storm water run-off into streams. The increased rate of storm water run-off can result in higher flows in streams, in a more rapid rise in streams' water levels and can potentially result in local or widespread flooding in areas adjacent to the stream. However, during flood conditions it is likely that the increase in run-off would be less than significant because under these conditions run-off from pervious surfaces is typically high also.

The potential cumulative impact would be an estimated increase of 10 to 15 cubic feet per second in the peak flood flow. This assumes that there is rainfall in the local area at the time that the peak flood flow occurs in Uvas Creek. This represents less than 0.3 percent increase in the 10-year flood flow of 5,500 cubic feet per second, which does not overflow the channel, and an increase of 0.1 percent in the 100-year flow of 14,000 cubic feet per second. This would not be a significant increase in the flood flows or flood elevations for Uvas Creek.

For downstream areas, including Pajaro River, the potential increases would be even smaller due to the larger existing flows and the extensive flood plain storage in the Soap Lake area downstream of Monterey Road near the Llagas Creek confluence.

Transportation/Circulation

A traffic impact assessment prepared for the proposed project determined that the increase in traffic associated with the proposed project and other proposed or existing development would result in traffic congestion at one intersection. The cumulative conditions level of service at the intersection of Monterey Street and Monterey Frontage Road would be below the standards prescribed by the *City of Gilroy General Plan*. A mitigation measure in Section 2.6 Transportation/ Circulation would require the installation of a signal light at this intersection prior to completion of Phase IV of the proposed sports park. With implementation of this mitigation measure the proposed project would not result in a significant cumulative traffic impact.

Air Quality

The San Francisco Bay Area is designated by the U.S. EPA as a non-attainment area for the national ozone standard. The region has had recent violations of the national ambient air quality standard for ozone. The State Implementation Plan (SIP), a compilation of plans and regulations that govern how the region complies with the Federal Clean Air requirements is being revised. The 1999 SIP will identify how the region will attain the national air quality standard for ozone in the future. The addition of the vehicular trips and associated emissions from the proposed project and other proposed and existing development in the area would contribute to cumulative air quality impacts in a non-attainment area.

Significant Irreversible Environmental Changes

The proposed project would result in the permanent loss of prime agricultural land. While this loss is mitigated in part by the establishment of the Gilroy Agricultural Lands Area, the prime agricultural land lost to the proposed project is not replaceable. The loss of prime agricultural land would be a significant irreversible change.

Growth Inducing Impacts

Growth inducement generally refers to the likelihood that a proposed project will foster growth in the surrounding area, either directly or indirectly. The most common factor in fostering growth is the removal of obstacles to population or economic growth.

The proposed project would require the extension of a recycled water distribution line. Recycled water is used primarily for irrigation of large park or open space areas, and extension of this line would not be likely to induce concentrated urban growth. All other infrastructure is currently available near the project site.

The project site is currently within the City of Gilroy 20-year development area. The proposed project would transfer the project site into the Urban Service Area. Development within Urban Service Areas is generally expected to occur within an approximate five-year timeframe. Development of those parcels that are not part of the proposed sports park could be hastened by the development of the sports park. The proposed project could have growth inducing impacts on the project site and possibly on adjacent areas.

Summary of Alternatives Analysis

Four alternatives to the proposed project were analyzed to determine if they would achieve project objectives while minimizing environmental impacts. The " No

Project" alternative would maintain the area in its current use and no Urban Service Amendment, annexation or sports park and related development would take place. Three alternative locations were also studied: Santa Teresa Boulevard at State Highway 152; Santa Teresa Boulevard and Miller Avenue; and Monterey Road at Bolsa Road.

The "No Project" alternative is the environmentally superior alternative, because it eliminates the unavoidable significant impact of loss of prime farmland. However, the "No Project" alternative does not achieve project objectives of providing the community with additional athletic fields and parkland. The proposed project has beneficial biological impacts that would not be achieved with the "No Project" alternative. The remaining alternatives and the proposed project are all approximately equal in terms of their environmental impacts, and the selection of one alternative as the environmentally superior is based on very fine shades of interpretation.

Though very close to the other remaining alternatives and the proposed project in terms of its environmental effects, the Santa Teresa Boulevard and Miller Avenue alternative is the environmentally superior alternative among the remaining alternatives. The principal factor that favors this alternative is its reduced impact on prime farmland compared to the other alternative locations. However, this alternative may result in traffic impacts that could be difficult to mitigate.

TABLE S-1

Summary of Impacts and Mitigation Measures

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Agricultural Considerations	**Loss of Prime Farmland.** Development of the sports park would result in the loss of 78.4 acres of prime farmland identified in the Farmland Mapping and Monitoring Program over the 20-year build-out of the proposed sports park. **Loss of Prime Farmland** Approval of the Urban Service Area amendment and development of parcels adjacent to the sports park site could ultimately result in the loss of the remaining 54.8 acres of designated farmland within the project site.	**Unavoidable Significant**	N/A	The establishment of the Gilroy Agricultural Lands Area by both the City of Gilroy and the County of Santa Clara serves as a regional mitigation for losses of prime farmland in southern Santa Clara County outside of the agricultural lands area. Although this regional mitigation has been implemented, it does not reduce the loss of prime farmland to a less than significant level and the proposed project would still be considered to have a significant and unavoidable impact on prime farmland.	**Unavoidable Significant**
Agricultural Considerations	**Conflict With Williamson Act Contract.** Four of the parcels on the project site were under Williamson Act contract. Notices of non-renewal were filed and the contracts expired January 1, 1999.	**No Impact**	N/A	None Required	**No Impact**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Agricultural Considerations	**Effect on Adjacent Agricultural Uses.** Implementation of the proposed project would not affect agricultural operations off the project site.	**No Impact**	N/A	None Required	**No Impact**
Geology	**Seismic Hazards.** The proposed project exposes people or structures to a small risk of potential substantial adverse effects involving seismic hazards.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Hydrology	**Storm Water Run-off.** Storm water run-off from access roads, parking lots and pathways could increase the rate of storm water discharge into Uvas Creek and the Pajaro River drainage during some weather conditions.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Hydrology	**On-Site Flood Flowage.** SCVWD holds a flood flowage easement that restricts land use and development on a large portion of the project site. Inappropriate development within this easement could put structures at risk of damage and people at risk of injury or death from storm-related flooding.	**Potentially Significant**	1	The City shall have a hydrology report prepared for the project by a qualified hydrologist or engineer, to address hydrology-related design requirements for the project site and buildings.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Hydrology	**Surface Water Quality.** During construction, grading will expose sediments to rain or wind erosion and subsequent transportation of sediments to the Uvas Creek, Pajaro River and Monterey Bay. Materials used and wastes generated during construction would degrade water quality also. Development of the project would generate non-point source pollutants from newly established urban activity at the project site.	**Significant**	2 3	The City shall submit a Notice of Intent and detailed engineering designs to the Central Coast Regional Water Quality Control Board, and implement a Storm Water Pollution Prevention Plan that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site. The City shall submit plans for review by, and obtain an approved permit from the Santa Clara Valley Water District.	**Less than Significant**
Hydrology	**Surface Water Quality.** Operation of the Gilroy Sports Park will introduce new urban pollutants to the project site. These contaminants could be transported to the drainage system, polluting downstream water systems.	**Potentially Significant**	1a	Project plans, subject to the review and approval of the City of Gilroy Planning Division, shall include a sedimentation basin adequate for filtering out heavy storm water contaminants such as silt, and grease traps suitable for filtering out other urban pollutants to the extent feasible. The sedimentation basin and grease trap shall be designed subject to the review and approval of the City of Gilroy Engineering Division and shall be installed at the time that the storm water out-fall is constructed.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Public Services and Service Systems	**Construction of New Infrastructure.** The proposed project does not require substantial extensions or upgrades to the existing potable water supply, wastewater or storm drain infrastructure.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Public Services and Service Systems	**Water Supply.** The proposed project would result in a minimal increase in demand for potable water. The proposed project would increase demand for recycled water for irrigation.	**No Impact**	N/A	None Required	**No Impact**
Public Services and Service Systems	**Police and Fire Services.** The proposed project does not result in the need for additional facilities for the provision of police or fire services.	**No Impact**	N/A	None Required	**No Impact**
Biological Resources	**Loss of Habitat.** Due to continuous human interaction, agricultural fields typically provide little habitat for wildlife and do not represent a significant biological resource.	**No Impact**	N/A	None Required	**No Impact**
Biological Resources	**Riparian Buffer.** The proposed 50-foot habitat buffer will substantially increase the amount of native habitat along Uvas Creek.	**Beneficial**	N/A	None Required	**Beneficial**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Invasive Plant Species.** The riparian habitat along Uvas Creek could be affected by the presence of non-native, invasive plant species.	**Significant**	4	Project plans shall include a habitat buffer designed to include appropriate native plant species and shall not include plantings of non-native, invasive plant species. Wherever possible, the east side of the trail shall be planted with native grasses or other native species to provide additional native habitat.	**Less Than Significant**
Biological Resources	**Loss of Significant Trees.** Some of the trees along the north side of Thomas Road–Luchessa Avenue, along the north side of Mesa Road, and through the riparian habitat leading to and from the proposed pedestrian bridge may be considered "significant" trees that might be removed or injured during construction activities.	**Potentially Significant**	5 6	A field survey shall be conducted to determine the number type, size and location of any potentially significant tree to be removed. The protected zone (one to 1.5 times the distance from the trunk to the dripline, depending on the tree species) of any trees or groups of trees to be retained shall be fenced to prevent injury to the trees during construction.	**Less Than Significant**
Biological Resources	**Riparian Habitat.** Construction of the pedestrian bridge over Uvas Creek could disturb riparian woodland habitat.	**Potentially Significant**	7	A Habitat Mitigation Plan shall be prepared to identify the exact amount and location of impacted and replacement habitat, and shall specify replacement specifications for any removed habitat.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Riparian Habitat.** Construction of the pedestriar. bridge over Uvas Creek could introduce fill material into the creek and/or increase turbidity in the creek and interfere substantially with the movement of steelhead as well as other fish and aquatic wildlife.	**Significant**	8	A Section 1603 Streambed Alteration Agreement shall be obtained from the California Department of Fish and Game. Construction activities in or adjacent to Uvas Creek to occur when the creek is dry or has a very low flow (generally June through October 15).	**Less Than Significant**
			9	The City shall contact the U.S. Army Corps of Engineers to determine who has jurisdiction over the bridge construction activities and if a permit is required for bridge construction.	
			10	Erosion control measures shall be installed along portions of Uvas Creek to prevent sediment from filling the creek.	

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Burrowing Owls.** Construction activity along the slope of the levee in the northwest corner of the project site could result in the direct loss of burrowing owl nests, including eggs and young, or the abandonment of an active nest by the adults.	**Potentially Significant**	11	Field surveys shall be conducted to determine if burrowing owls are present in the construction zone or within 250 feet of the construction zone if any construction would occur during the nesting and/or breeding season of burrowing owls potentially nesting in the area (February 1 through August 31) and/or during the winter residency period (December 1 and January 31). If active nests are found, a burrowing owl habitat mitigation plan shall be prepared.	**Less Than Significant**
			12	The City shall arrange for a biologist to inform workers of the potential presence of special-status wildlife and measures to be implemented to avoid loss of these wildlife during construction activities.	

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Raptors.** Construction activities in or near the riparian woodland habitat found along Uvas Creek could result in the direct loss of white-tailed kite, northern harrier, Cooper's hawk, and short-eared owl nests, including eggs and young, or the abandonment of an active nest by the adults.	**Potentially Significant**	12 13	See above. A field survey shall be conducted by a qualified biologist to determine if active raptor nests are present in the construction zone or within 250 feet of the construction zone if any construction would occur during the nesting and/or breeding season of raptors potentially nesting in the areas proposed for development (generally March 1 through August 1). If active nests are found, at the discretion of the biologist, clearing and construction within 250 feet shall be postponed or halted until the nests are vacated and juveniles have fledged and there is no evidence of a second attempt at nesting.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Amphibians.** Construction activity in or near the riparian woodland habitat found along Uvas Creek could result in the direct and indirect loss of California red-legged frog, foothill yellow-legged frog, western spadefoot toad, California tiger salamander, and western pond turtle. Use of the sports park may result in death or harassment of wildlife by pets and people, consumption by predators attracted to the project site, or death or injury from pesticides.	**Potentially Significant**	8	See above.	**Less Than Significant**
			10	See above.	
			12	See above.	
			14	A biologist shall monitor the project site during construction activities within 100 feet of Uvas Creek. If California red-legged frog, foothill yellow-legged frog, western spadefoot toad, California tiger salamander, and/or western pond turtle turtles are observed at the site, construction activities shall be halted and the United States Fish and Wildlife Service shall be contacted for further assistance.	
			15	All food-related trash items shall be enclosed in sealed containers and regularly removed from the project area to deter attraction of potential predators Pets shall not be allowed on the construction site.	

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Habitat Disturbance During Construction.** Accidental spills of contaminants or other harmful materials, such as diesel fuel or oil, from construction vehicles could spread into the riparian woodland habitat and Uvas Creek and harm or kill wildlife. During use of the sports park, Uvas Creek could be contaminated by pesticides, fertilizers, and similar substances.	**Potentially Significant**	2 3 16 17	See above. See above. A plan shall be prepared to allow prompt response to any accidental spills, and inform workers of the importance of preventing spills and of the appropriate measures to take in case of a spill. Guidelines shall be established for the prevention of contamination of the creek by pesticides and fertilizers from maintenance of the athletic fields.	**Less Than Significant**
Biological Resources	**Habitat Disturbance During Recycled Water Line Construction.** Construction activity could produce erosion or accidental spills of contaminants that could decrease habitat quality and interfere with the movement or well-being of wildlife.	**Potentially Significant**	10 16	See above. See above.	**Less Than Significant**
Biological Resources	**Effects of Nighttime Lighting on Wildlife.** Nighttime lighting of the sports park play fields could spill over into the riparian woodland habitat and disturb wildlife, restrict the movement or activity of wildlife, or facilitate increased predation of wildlife.	**Potentially Significant**	18	A lighting plan for the sports park shall be developed requiring all lighting in the western portion of the sports park to be directed away from the riparian habitat, prohibiting lighting along the Uvas Creek Trail; and generally restricting lighting after 11:00 PM.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Domestic Activities.** People and unleashed pets wandering off the Uvas Creek Trail could restrict the movement or activity of and/or disturb or kill wildlife	**Potentially Significant**	19	A signage plan for the sports park shall be prepared to outline the language, number and location of signs to dissuade people from straying off the Uvas Creek Trail and to prohibit unleashed dogs on the Uvas Creek trail.	**Less Than Significant**
Transportation Circulation	**LOS Below City Standards.** With completion of Phase V of the proposed sports park the intersection of Monterey Street and Monterey Frontage Road would be congested.	**Significant**	20	Prior to completion of Phase IV of the proposed sports park the City of Gilroy shall install a traffic signal and make lane improvements to at the intersection of Monterey Street and Monterey Frontage Road.	**Less Than Significant**
Transportation Circulation	**State Highway Traffic.** The proposed sports park would not cause congestion on nearby freeway segments.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Transportation Circulation	**Bicyclist and Pedestrian Safety.** The proposed design of the temporary alignment of the Uvas Creek Trail crossing of Thomas Road–Luchessa Avenue would result in a potential safety hazard to users of the trail.	**Significant**	21	The Uvas Creek Trail extension shall connect by direct route to Thomas Road–Luchessa Avenue at Princevalle Street via a built-up earth ramp on the levee's north embankment.	**Less Than Significant**
Transportation Circulation	**Bicyclist and Pedestrian Safety.** The temporary alignment of the Uvas Creek Trail crossing of Thomas Road–Luchessa Avenue would expose trail users to high speed cross traffic.	**Significant**	22	Cross walks shall be installed across Thomas Road–Luchessa Avenue at Princevalle Street and stop signs shall be installed on Thomas Road–Luchessa Avenue at Princevalle Street.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Transportation Circulation	**Bicycle Access.** The project plans do not indicate a bicycle route connection between Monterey Street, a designated bicycle route and the proposed sports park access road.	**Significant**	23	The City shall construct a Class 1 path on the west side or Class II bicycle lanes on both sides of Monterey Frontage Road as a part of the design and construction of improvements to Monterey Frontage Road between Monterey Street and the sports park access road.	**Less Than Significant**
Transportation Circulation	**Pedestrian Access.** Sports park-related traffic increases along Monterey Street and Monterey Frontage Road will present hazardous conditions to pedestrians accessing the proposed sports park.	**Significant**	24	Prior to completion of Phase IV of the proposed project the City of Gilroy shall construct a minimum 6-foot wide sidewalk along the west side of Monterey Frontage Road and a minimum 10-foot wide sidewalk along Monterey Street between Thomas Road–Luchessa Avenue and the sports park access road.	**Less Than Significant**
Transportation Circulation	**Parking Supply.** The proposed sports park would have a shortage of 180 parking spaces at the completion of Phase V.	**Significant**	25	The City of Gilroy shall include in project plans, 180 parking spaces from a later phase to be built prior to completion of Phase V.	**Less Than Significant**
Transportation Circulation	**Internal Circulation.** The transportation impact assessment made recommendations for improvements to internal vehicular circulation at the proposed sports park.	**No Impact**	N/A	None Required	**No Impact**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Air Quality	**Sports Park Operations.** The proposed sports park would result in the emission of various pollutants into the atmosphere. These emissions would be below the thresholds established by the BAAQMD.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Air Quality	**Project Construction.** Construction activities at the project site could result in a significant adverse air quality impact from dust.	**Potentially Significant**	26	Dust control measures shall be incorporated into all permits for any phase of the project. The measures shall be implemented as necessary to adequately control dust.	**Less Than Significant**
Noise	**Noise from Park Activities.** Activities at the proposed sports park, including athletic events and traffic entering and exiting the project site would generate noise.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Noise	**Construction Noise.** Construction activities at the project site could result in high levels of noise.	**Significant**	27	Construction activities shall be limited to specified hours.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Archaeological Resources	Currently unidentified buried cultural resources may be found during construction on the project site.	**Potentially Significant**	28	The city shall contract with a qualified archaeologist to arrange a schedule for monitoring the project site during grading and excavation activities.	**Less Than Significant**
			29	If archaeological resources or human remains are discovered during construction, work shall be halted at a minimum of 200 feet from the find and the area shall be staked off. The project developer shall notify a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented.	
			30	If human remains are found during construction there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of Santa Clara County is contacted to determine that no investigation of the cause of death is required. If the coroner determines the remains to be Native American the coroner shall contact the Native American Heritage Commission within 24 hours.	

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Aesthetics	**Change in Rural Character.** Development of the project site would permanently alter the existing rural character of the area.	Less Than Significant	N/A	None Required	Less Than Significant
Aesthetics	**Nighttime Lighting.** The proposed sports park would introduce a major new source of light to the local area.	Less Than Significant	N/A	None Required	Less Than Significant

Note: Impacts and Mitigation Measures are summarized in this table. Refer to the text of the Environmental Impact Report for the complete text of the impacts and mitigation measures associated with each area of concern.

Source: EMC Planning Group Inc.

4.0 Changes to the Draft EIR Text

Changes to the text of the EIR resulting from comments received during the public review period, or to correct errors found in the Draft EIR are presented in this section. Deletions to the text are shown with ~~strikethrough~~ type and additions to the text are shown with underline type.

An incorrect policy number was included in the Draft EIR. The following change is made to page 1-29 of the Draft EIR:

> ***Natural Environment Policy ~~11~~ 23:*** In preference to the construction of expensive flood prevention facilities, floodways will be left open for agricultural and recreational use in areas of particular risk and where protection is minimal.

Based on comments received during the public review period the following changes are made to page 1-37 of the Draft EIR:

> ***Growth and Development Policy C-GD 6:*** Hazard and resource areas with the following characteristics shall be considered unsuited for urban development:
>
> e. prime agricultural soils.

Consistency: The proposed project would convert prime farmland to non-agricultural uses over a projected development period of 20 years. ~~No alternative site was identified that would not result in the conversion of prime agricultural land.~~ The proposed project is **inconsistent** with this policy.

> ***Growth and Development Policy C-GD 7***: Urban expansion should be planned on a staged, orderly basis, consistent with applicable plans (e.g. city, County, countywide plans) and the availability of needed urban services and facilities. The discouragement of expansion of cities' Urban Service Areas should be recommended to the LAFCO.

Consistency: The project site is currently within the City of Gilroy planning area and is within the city's 20-year development boundary. The proposed sports park is expected to be built in a staged and orderly basis in phases over a 20-year period. The proposed project will result in orderly development of the City of Gilroy. The proposed project is located closer to substantial utility infrastructure and is more contiguous with existing development than the alternative sites that were identified.

The project site is also closer to existing major transportation nodes. Therefore the proposed project is consistent with the first part of this policy.

The discouragement of expansion of the City's Urban Service Area is not recommended because the City planning staff believes that the project site is superior to alternative sites in terms of proximity to existing development, utility infrastructure, transportation facilities and lodging facilities. The sports park is expected to generate a substantial amount of traffic, and a location near major transportation facilities is considered very important. The nearby location of lodging facilities will decrease the number of trips somewhat during regional events since out-of-town participants staying at the lodgings will be able to easily reach the facility on foot. The project site is adjacent to development on two sides. None of the alternative sites have this proximity to existing development.

~~The proposed project is **consistent** with this policy.~~

Therefore, the proposed project would be **consistent** with the first part of Santa Clara County Growth and Development Policy C-GD 7 but **inconsistent** with the second part of the policy.

Based on comments received during the public review period the following changes are made to page 1-40 of the Draft EIR:

> ***Urban Service Area Amendment Policy 4:*** LAFCO will consider factors such as the following to determine the local and regional impacts of a proposed Urban Service Area amendment:
>
> a. The ratio of lands planned for residential use to land planned for employment-producing use;
>
> b. The existence of adequate regional and local transportation capabilities to support the planned city growth;
>
> c. Ability of the city to provide urban services to the growth areas without detracting from current service levels;
>
> d. The ability of school districts to provide school facilities;
>
> e. Whether the conversion of agricultural and other open space lands is premature, or if there are other areas into which to channel growth;
>
> f. The role of special districts in providing services;
>
> g. Environmental considerations which may apply;
>
> h. The impacts of proposed city expansion upon the County as a provider of services;
>
> i. Fiscal impacts on other agencies.

Consistency: Each of these factors is discussed below:

a. There are three existing houses that would remain, at least in the short term, on the project site. A residence would be provided for a caretaker for the sports park. An unknown number of employees would work at the project site, but it would be a fairly small number. Many of the jobs at the project site would be low-paid seasonal jobs.

b. The proposed project is served by U.S. Highway 101, Monterey Street and other local streets, and the extension of the Uvas Creek Trail, which is proposed as a part of this project.

c. The City of Gilroy would extend domestic and recycled water supply lines and sewer and storm drain lines to the project site. The City of Gilroy police and fire departments would provide public safety services to the project site. This extension of services would not reduce the level of service available to other areas of the city.

d. The proposed project will not affect school enrollment. This factor is not relevant to the proposed project.

e. The proposed project would result in the conversion from agricultural use of the proposed 78.4-acre sports park site. The remaining parcels would remain in agriculture at this time. ~~The alternate sites are currently in agricultural use and they would be removed from agricultural use if they were developed for a sports park.~~

f. The City of Gilroy would provide water, sewer, storm drainage, police and fire services to the site.

g. The amendment is subject to the analysis of this EIR. The proposed project would result in the conversion of prime agricultural land to non-agricultural uses. This would be a significant and unavoidable impact. Other potential impacts have been identified in this EIR and mitigation measures are presented to reduce those impacts to a less than significant level.

h. The proposed project would not increase the demand on services provided by Santa Clara County. Services currently provided by the county would be provided by the City of Gilroy if the proposed project is approved.

i. A fiscal analysis is currently under preparation for the proposed project.

The proposed project is **consistent** with items a–d and f–i of this policy, but **inconsistent** with item e of this policy.

Based on comments received during the public review period and at the direction of the project hydrologist, the following changes are made to page 2-17 of the Draft EIR:

Storm Water Run-off

The sports park site is currently undeveloped farmland. A large proportion of the rainfall that lands on the project site soaks into the soil. The general slope of the site is away from Uvas Creek towards Monterey Road. Much of the water that runs off the project site drains to Monterey Road and via a storm drain into Uvas Creek.

The proposed project would include turf areas, access roads, parking lots, pathways and structures. ~~Storm water run-off from these surfaces could, under some conditions, increase the rate of storm water discharge into Uvas Creek and the Pajaro River drainage. However, during flood conditions it is likely that the increase in run-off due to new impervious surfaces would be less than significant, since under these conditions the run-off rate from pervious surfaces is typically high also.~~

~~Under some rainfall conditions it is possible that the run-off rate could be lower with the proposed project than with existing conditions. Turf areas may have a lower run-off rate than the existing agricultural fields, and run-off amounts can vary with the intensity of the storm (Kirk Wheeler, personal communication, January 26, 1999).~~ Storm water run-off from these impervious surfaces may increase the rate of storm water discharge to Uvas Creek and the Pajaro River watershed from the project site. The increase in run-off is generally greatest for small rainfall events during which the rainfall has the greatest potential loss top surface storage and infiltration into the soil. For individual sites, the peak run-off may also be increased by the construction of a storm drain system, which reduces the time for flow to discharge to the creek or stream.

For large flood events, the potential increase in run-off due to impervious surface area is generally much smaller. The surface storage and soil infiltration capacity are filled early in large storms and the soil is generally saturated at the time of the peak rainfall. For large watersheds such as Uvas Creek, the peak flood flow generally occurs hours after the peak rainfall.

For Uvas Creek, the downstream channel generally has capacity for low flows up to approximately the 10-year flood event. Therefore, increased flooding from small storm events would not occur. For larger flood events, greater than the 10-year flood, the potential change in the site run-off would not have a significant effect on the peak flood flow rates and flooding from Uvas Creek.

Based on comments received during the public review period and at the direction of the project hydrologist the following changes are made to page 2-16:

Storm Water Quality

A variety of contaminants are common to urban area storm water and irrigation run-off. These contaminants include coliform bacteria, sediment, organic chemicals, nutrients and pesticides from landscaping and athletic fields, and fuel constituents, heavy metals, oil and grease from automobiles, roads and parking areas. These contaminants could be transported to the drainage system, polluting downstream water systems. The potential for contamination exists during both the construction and operation of the proposed project.

Water quality degradation is regulated by the Federal National Pollution Discharge Elimination System (NPDES) Program, which was established by the Clean Water Act. The NPDES controls and reduces pollutants to water bodies from point and non-point discharges. In California, the California Regional Water Quality Control Boards (RWQCB) administer the 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 five acres of land during construction are required to file a notice of intent to be covered under the State NPDES General Construction Permit for discharges of storm water associated with construction activities. The applicant must propose control measures that are consistent with the State NPDES General Construction Permit and consistent with recommendations and policies of the local agency and the RWQCB.

The State NPDES General Construction Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site 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.

The SCVWD also requires a project review and permit for any construction that takes place within 50 feet of any watercourse within its boundaries. Because of the flood flowage easement, SCVWD will review project plans to assure that the project will not have any detrimental effects on watercourses, habitat or animals. Portions of the proposed project would involve grading and paving near the top of the Uvas Creek levee. A SCVWD permit may be required for all or some of the construction work at the sports park site.

<u>Project plans include the installation of a sedimentation basin near the storm drain out-fall into Uvas Creek. A grease trap may also be employed.</u>

Based on comments received during the public review period the following impact statement is added to page 2-18 of the Draft EIR:

Potentially Significant Impact–Surface Water Quality. A varicty of contaminants are common to urban area storm water and irrigation run-off. These contaminants include coliform bacteria, sediment, organic chemicals, nutrients and pesticides from landscaping and athletic fields, and fuel constituents, heavy metals, oil and grease from automobiles, roads and parking areas. Operation of the Gilroy Sports Park will introduce new urban pollutants to the project site and this could potentially result in the pollution of Uvas Creek and the Pajaro River. These contaminants could be transported to the drainage system, polluting downstream water systems. This would be a significant adverse environmental impact.

Based on comments received during the public review period the following Mitigation Measure is added to page 2-18 of the Draft EIR:

1a. Project plans, subject to the review and approval of the City of Gilroy Planning Division shall include a sedimentation basin adequate for filtering out heavy storm water contaminants such as silt, and grease traps suitable for filtering out other urban pollutants to the extent feasible. The sedimentation basin and grease trap shall be designed subject to the review and approval of the City of Gilroy Engineering Division and shall be installed at the time that the storm water out-fall is constructed.

Based on comments received during the public review period the following change is made to page 2-76 of the Draft EIR:

Significant Impact–LOS Below City Standards. With completion of Phase V of the proposed project, the level of service at he intersection of Monterey Street and Monterey Frontage Road would be LOS D during the weekday PM peak hour and LOS ~~E~~ F during the Saturday peak hour. This level of service does not meet the standards for roadway operation as contained in the *City of Gilroy General Plan*. This is a significant adverse environmental impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Based on comments received during the public review period the following impact statement is added to page 2-76 of the Draft EIR:

Significant Impact–LOS Below City Standards. With completion of Phase V the intersection of Monterey Road and Monterey Frontage Road will operate at LOS F during the Saturday peak hour. The intersection will continue to operate at LOS F during the Saturday peak hour after the completion of Phases VI and VII, with average delays increasing from 45.6 seconds after completion of Phase V to 117.1 seconds after completion of Phases VI and VII.

With implementation of Mitigation Measure 20 in the Draft EIR, the intersection of Monterey Road and Monterey Frontage Road will operate at LOS C during the Saturday peak hour with an average delay of 18.8 seconds under cumulative conditions.

With completion of Phase V the intersection of Monterey Road and Monterey Frontage Road will operate at LOS D during the weekday PM peak hour. The intersection will operate at LOS F during the weekday PM peak hour after the completion of Phases VI and VII, with average delays increasing from 28.4 seconds after completion of Phase V to 60.0 seconds after completion of Phases VI and VII.

With implementation of Mitigation Measure 20 in the Draft EIR, the intersection of Monterey Road and Monterey Frontage Road will operate at LOS C during the weekday PM peak hour with an average delay of 16.7 seconds under cumulative conditions.

Implementation of Mitigation Measure 20 in the Draft EIR will be adequate to maintain LOS C or better at the intersection of Monterey Road and Monterey Frontage Road during both the weekday PM and Saturday peak hours under project build-out and cumulative conditions. No further mitigation measures are required.

Based on comments received during the public review period the following changes are made to pages 3-1 and 3-2 of the Draft EIR:

The City of Gilroy is expected to make the following findings regarding the loss of prime farmland prior to approving the project:

- The Gilroy Agricultural Lands Area is, at least partial mitigation for the loss of the 133.2 acres of prime farmland.
- The project site is adjacent to urban uses to the north (residential) and east (commercial), and is easily accessed from U.S. Highway 101.
- The sports park is a social benefit highly desired by the City of Gilroy and its citizens.
- There are no alternative sites for the sports park that would not result in the conversion of prime farmland.
- The project site is in a flood zone, which makes it undesirable for intensive urban development and therefore, was available at a price the City of Gilroy could afford. ~~Alternative sites were not available at a price affordable to the City.~~ The City could allocate sufficient funds to purchase one of the alternate sites if this were determined to be a necessary expenditure and the economic and social consequences were deemed acceptable.

Based on comments received during the public review period and at the direction of the project hydrologist the following changes are made to page 3-4 and page 3-7 of the Draft EIR:

Hydrology

Urban development in the Pajaro River watershed has resulted in the covering of many acres of permeable land with impermeable surfaces such as pavement and structures. Essentially none of the rainfall that hits impervious surfaces is absorbed into the surfaces on which it falls. When rainfall lands on these impermeable surfaces, it drains on the surface and eventually into a drainage pipe or watercourse. Storm water in the Pajaro River watershed that is not absorbed into the soil or retained in reservoirs eventually makes its way into the Pajaro River.

Under certain storm conditions increases in the amount of area covered in impervious materials results in increased rates of run-off into streams. The increased rate of storm water run-off can result in higher flows in streams and in a more rapid rise in streams' water levels. Increased flows in streams often result in local or widespread flooding in areas adjacent to the stream. Two major floods have

occurred in the lower reaches of the Pajaro River in the past several years, resulting in extensive property damage and displacement of residents. However~~, during flood conditions it is likely that the increase in run-off due to new impervious surfaces would be less than significant, since under these conditions the run-off rate from pervious surfaces is typically high also.~~ due to the location of the project site within the Uvas Creek watershed, the peak flow in Uvas Creek at the project site occurs hours after the peak rainfall. Therefore, the site soils would be saturated and the surface storage would be filled by prior rainfall at the time of the peak flows in Uvas Creek. The minimum infiltration capacity for typical soils in the Gilroy area range from 0.05 inches per hour for heavy clays to 0.20 cubic inches per hour for loams. For the proposed project, this represents approximately a 1.0 cubic feet per second difference in runoff, assuming five acres of impervious area and an infiltration rate of 0.20 inches per hour.

On a cumulative basis, the proposed and approved projects include sites in hillside areas with shallow clay soils that would have even lower minimum infiltration capacities than the project site. The potential cumulative impact would be an estimated increase of 10 to 15 cubic feet per second in the peak flood flow. This assumes that there is rainfall in the local area at the time that the peak flood flow occurs in Uvas Creek. This represents less than 0.3 percent increase in the 10-year flood flow of 5,500 cubic feet per second, which does not overflow the channel, and an increase of 0.1 percent in the 100-year flow of 14,000 cubic feet per second. This would not be a significant increase in the flood flows or flood elevations for Uvas Creek.

For downstream areas, including Pajaro River, the potential increases would be even smaller due to the larger existing flows and the extensive flood plain storage in the Soap Lake area downstream of Monterey Road near the Llagas Creek confluence.

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Appendix A

Mitigation Monitoring Program

Gilroy Sports Park and USA Amendment EIR

Mitigation Monitoring Program

Introduction

On January 1, 1989, the California State Legislature passed into law Assembly Bill 3180. This bill requires public agencies to adopt reporting or monitoring programs when they approve projects subject to an environmental impact report or a negative declaration that includes mitigation measures to avoid significant adverse environmental effects. The reporting or monitoring program is to be designed to ensure compliance with conditions of project approval during project implementation in order to avoid significant adverse environmental effects.

The law was passed in response to historic non-implementation of mitigation measures presented in environmental documents and subsequently adopted as conditions of project approval. In addition, monitoring ensures that mitigation measures are implemented and thereby provides a mechanism to evaluate the effectiveness of the mitigation measures.

A definitive set of project conditions would include enough detailed information and enforcement procedures to ensure the measure's compliance. This monitoring program is designed to provide a mechanism to ensure that mitigation measures and subsequent conditions of project approval are implemented.

Monitoring Program

The basis for this monitoring program is the mitigation measures included in the environmental impact report. These mitigation measures are designed to eliminate or reduce significant adverse environmental effects to less than significant levels. These mitigation measures become conditions of project approval, which the project proponent is required to complete during and after implementation of the project. The measures are arranged in order according to the stage in the project in which implementation must occur. In some cases, different parts of a single mitigation measure will be implemented at different stages; in this case the measure is listed under the stage at which initial implementation occurs, and implementation times of other parts of the measure are noted.

The attached checklist is proposed for monitoring the implementation of the mitigation measures. This monitoring checklist contains all appropriate mitigation measures in the environmental impact report.

Monitoring Program Procedures

It is required that the City of Gilroy uses the attached monitoring checklist for the project. The monitoring program should be implemented as follows:

1. The city community development director should be responsible for coordination of the monitoring program, including the monitoring checklist. The community development director should be responsible for completing the monitoring checklist and distributing the checklist to the responsible individuals or agencies for their use in monitoring the mitigation measures.

2. Each responsible individual or agency will then be responsible for determining whether the mitigation measures contained in the monitoring checklist have been complied with. Once all mitigation measures have been complied with, the responsible individual or agency should submit a copy of the monitoring checklist to the community development director to be placed in the project file. If the mitigation measure has not been complied with, the monitoring checklist should not be returned to the community development director.

3. Prior to issuance of a certificate of occupancy, the community development director should review the checklist to ensure that all mitigation measures and additional conditions of project approval included in the monitoring checklist have been complied with. A certificate of occupancy should not be issued until all mitigation measures and additional conditions of project approval included in the monitoring checklist have been complied with.

4. If a responsible individual or agency determines that a non-compliance has occurred, a written notice should be delivered by certified mail to the project proponent within 10 days, with a copy to the community development director, describing the non-compliance and requiring compliance within a specified period of time. The City of Gilroy may take all actions provided in its municipal code in regards to such violations.

Mitigation Monitoring Checklist

The following table summarizes the project stages for which mitigation measures must be implemented:

Implementation Stage	Mitigation Measures Implemented
Included on project plans as appropriate	1a, 4, 18, 19, 25
Included in the final improvement plan for the Uvas Creek Trail	4, 18, 19, 21, 22
Prior to issuance of any permits for any phase	26, 27, 29, 30
Prior to issuance of a grading permit	1, 2, 3, 26, 27, 28, 29, 30
From 45 to 20 days prior to commencing grading activities	11
From 45 to 20 days prior to any clearing, grading construction in or adjacent to riparian habitat	11, 13
Prior to removal of any significant tree(s):	5
Prior to commencement of construction activities	6, 12, 16, 17
Prior to commencement of trail construction activities	6, 7, 12, 16, 17
Prior to commencement of bridge construction activities	6, 8, 9, 10, 12, 16, 17
During construction activities	14, 15
Concurrent with improvements to Monterey Frontage Road	6, 12, 14, 15, 16, 17, 23
Prior to completion of Phase IV of the sports park	20, 24

The following mitigation measures shall be **included on project plans as appropriate:**

Mitigation Measure Number	Nature of Mitigation	Party Responsible for Implementation	Party Responsible for Monitoring
1a	Project plans, subject to the review and approval of the City of Gilroy Planning Division shall include a sedimentation basin adequate for filtering out heavy storm water contaminants such as silt, and grease traps suitable for filtering out other urban pollutants to the extent feasible. The sedimentation basin and grease trap shall be designed subject to the review and approval of the City of Gilroy Engineering Division and shall be installed at the time that the storm water out-fall is constructed.	City of Gilroy	City of Gilroy Engineering Division and City of Gilroy Engineering Division
4	Project plans, subject to the review and approval of the City of Gilroy Planning Division, shall include a habitat buffer designed to include appropriate native plant species and shall not include plantings of non-native, invasive plant species. The currently unvegetated portion of the 50foot (minimum) buffer area west of the trail shall be planted with locally-obtained native grass, shrub and riparian understory species. Wherever possible, the east side of the trail shall be planted with native grasses or other native species to provide additional native habitat before giving rise to the turf athletic fields.	City of Gilroy	City of Gilroy Planning Division
18	Prior to final project approval subject to the review and approval of the City of Gilroy Planning Division, a lighting plan for the sports park shall be developed. This lighting plan shall include at least the following elements: • All lighting in the western portion of the sports park will be directed away from the riparian habitat; • No lighting will be installed along the Uvas Creek Trail; and • No lighting will generally be allowed after 11:00 PM.	City of Gilroy	City of Gilroy Planning Division
19	Prior to final project approval, a signage plan for the sports park shall be prepared to outline the language, number and location of signs to dissuade people from straying off the Uvas Creek Trail and to prohibit unleashed dogs on the Uvas Creek trail, subject to approval by the City of Gilroy Planning Division.	City of Gilroy	City of Gilroy Planning Division
25	The City of Gilroy shall include in project plans, subject to review and approval of the City of Gilroy Planning Division, an additional 180 parking spaces to be built prior to completion of Phase V.	City of Gilroy	City of Gilroy Planning Division

The following mitigation measures shall be **included in the final improvement plan for the Uvas Creek Trail:**

Mitigation Measure Number	Nature of Mitigation	Party Responsible for Implementation	Party Responsible for Monitoring
21	The final improvement plan for the Uvas Creek Trail extension, subject to the review and approval of the City of Gilroy Engineering Division, shall include a connection to Thomas Road–Luchessa Avenue that leaves the top of the levee at a point east of Princevalle Street and connects to Thomas Road–Luchessa Avenue at the intersection of Princevalle Street via a built-up earth ramp on the levee's north embankment.	City of Gilroy	City of Gilroy Engineering Division
22	The final improvement plan for the Uvas Creek Trail extension, subject to the review and approval of the City of Gilroy Engineering Division, shall include cross walks across Thomas Road–Luchessa Avenue at Princevalle Street and stop signs on Thomas Road–Luchessa Avenue at Princevalle Street.	City of Gilroy	City of Gilroy Engineering Division

The following mitigation measures shall be implemented **prior to issuance of any permits for any phase**:

Mitigation Measure Number	Nature of Mitigation	Party Responsible for Implementation	Party Responsible for Monitoring
26	The following dust control measures shall be incorporated into all permits for any phase of the project. The measures shall be implemented as necessary to adequately control dust subject to the review and approval of the City of Gilroy Planning Division. • Water all active construction areas at least twice daily; • 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 mph; • Install sandbags or other erosion control measures to prevent silt runoff to public roadways; • Replant vegetation in disturbed areas as quickly as possible; • Install wheel washers for all existing trucks, or wash off the tires or tracks of all trucks and equipment leaving the site; • Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) of construction areas; • Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 miles per hour; • Limit the area subject to excavation, grading and other construction activity at any one time.	City of Gilroy	City of Gilroy Planning Division

27	The following language shall be included on any permits issued for the sports park, subject to the review and approval of the City of Gilroy Engineering Division. "All noise generating construction activities shall be limited to weekdays between 7:00 AM and 7:00 PM, and to Saturdays and City holidays between 9:00 AM and 7:00 PM. No construction is allowed on Sundays. In addition, temporary berms or noise attenuation barriers shall be utilized when necessary."	City of Gilroy	City of Gilroy Engineering Division
29	Due to the possibility that significant buried cultural resources might be found during construction the following language shall be included any permits issued for the project site, including, but not limited to building permits for future development, subject to the review and approval of the Gilroy Planning Division: If archaeological resources or human remains are discovered during construction, work shall be halted at a minimum of 200 feet from the find and the area shall be staked off. The project developer shall notify a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented.	City of Gilroy	City of Gilroy Planning Division
30	In the event of an accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall ensure that this language is included in all permits in accordance with CEQA Guidelines section 15064.5(e): If human remains are found during construction there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of Santa Clara County is contacted to determine that no investigation of the cause of death is required. If the coroner determines the remains to be Native American the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code Section 5097.98.	City of Gilroy	City of Gilroy Planning Division

	The landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if: a) the Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission; b) the descendent identified fails to make a recommendation; or c) the landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.		

The following mitigation measures shall be implemented **prior to issuance of a grading permit** (this may be required at each phase for mitigation measures 2, 3 and 28):

Mitigation Measure Number	Nature of Mitigation	Party Responsible for Implementation	Party Responsible for Monitoring
1	The City shall have a hydrology report prepared for the project by a qualified hydrologist or engineer, to address hydrology-related design requirements for the site and buildings, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to issuance of a grading permit. All grading, design or other recommendations of this report shall be incorporated into project plans.	City of Gilroy	City of Gilroy Engineering Division and SCVWD
2	The City shall, for each phase of the project, submit a Notice of Intent (NOI) and detailed engineering designs to the Central Coast RWQCB. This permit shall require development and implementation of a SWPPP that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site. The SWPPP must include Best Management Practices that address source reduction and, if necessary, shall include practices that require treatment. The SWPPP shall be submitted to the City of Gilroy Engineering Division for review and approval prior to approval of a grading permit for each phase of the project.	City of Gilroy	City of Gilroy Engineering Division and RWQCB
3	The City shall submit plans for review by, and obtain an approved permit from the Santa Clara Valley Water District (SCVWD) prior to approval of a grading permit for each phase of the project.	City of Gilroy	SCVWD
28	The City shall contract with a qualified archaeologist to arrange a schedule for monitoring during grading and excavation activities due to the project site's creek-side location and proximity to recorded historic and prehistoric sites.	City of Gilroy	City of Gilroy Planning Division

The following mitigation measure shall be implemented **from 45 to 20 days prior to commencing grading activities**:

Mitigation Measure Number	Nature of Mitigation	Party Responsible for Implementation	Party Responsible for Monitoring
11	Subject to the review of the City of Gilroy Planning Division, no earlier than 45 days and no later than 20 days prior to commencement of grading or construction on or adjacent to the slope of the levee, field surveys shall be conducted at least four consecutive evenings by a qualified biologist to determine if burrowing owls are present in the construction zone or within 250 feet of the construction zone. These surveys shall be required only if any construction would occur during the nesting and/or breeding season of burrowing owls potentially nesting in the area (February 1 through August 31) and/or during the winter residency period (December 1 and January 31). Pre-construction survey results shall be submitted to the California Department of Fish and Game for review and approval. If active nests are found in within the survey area, a burrowing owl habitat mitigation plan shall be submitted to the California Department of Fish and Game for review and approval. The burrowing owl habitat mitigation plan shall contain mitigation measures contained in the California Department of Fish and Game Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 1995). Compliance with this mitigation measure may include, but not be limited to, the following: • Avoidance of occupied burrows during the nesting season (February 1 through August 31); • Acquisition, protection and funding for long-term management and monitoring of foraging habitat adjacent to occupied habitat; • Enhancement of existing burrows and/or creation of new burrows; • Passive relocation of burrowing owls.	City of Gilroy	City of Gilroy Planning Division

The following mitigation measure shall be implemented **from 45 to 20 days prior to any clearing, grading construction in or adjacent to riparian habitat:**

Mitigation Measure Number	Nature of Mitigation	Party Responsible for Implementation	Party Responsible for Monitoring
13	Subject to the review of the City of Gilroy Planning Division, no earlier than 45 days and no later than 20 days prior to commencement of clearing, grading or construction in or adjacent to any riparian habitat, a field survey shall be conducted by a qualified biologist to determine if active raptor nests are present in the construction zone or within 250 feet of the construction zone. These surveys shall be required only if any construction would occur during the nesting and/or breeding season of raptors potentially nesting in the areas proposed for development (generally March 1 through August 1). If active nests are found within the survey area, at the discretion of the biologist, clearing and construction within 250 feet shall be postponed or halted until the nests are vacated and juveniles have fledged and there is no evidence of a second attempt at nesting.	City of Gilroy	City of Gilroy Planning Division

The following mitigation measure shall be implemented **prior to removal of any significant tree(s):**

Mitigation Measure Number	Nature of Mitigation	Party Responsible for Implementation	Party Responsible for Monitoring
5	Prior to the removal of any significant tree(s), a field survey shall be conducted by a certified arborist to determine the number and location of each significant tree to be removed, the type and approximate size of each significant tree, and the reason for removal. These findings shall be included in a written report that contains specifications for replacing significant trees to be removed. The written report shall be prepared prior to the commencement of grading activities that take place along the north side of Thomas Road–Luchessa Avenue, along the north side of Mesa Road, and through the riparian habitat leading to and from the proposed pedestrian bridge, subject to approval by the City of Gilroy Planning Division.	City of Gilroy	City of Gilroy Planning Division

The following mitigation measures shall be implemented **prior to commencement of construction activities** (Additional mitigation measures also apply to particular phases of construction):

Mitigation Measure Number	Nature of Mitigation	Party Responsible for Implementation	Party Responsible for Monitoring
6	Prior to the commencement of construction activities, the protected zone (one to 1.5 times the distance from the trunk to the dripline, depending on the tree species) of any trees or groups of trees to be retained shall be fenced to prevent injury to the trees during construction. Soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials shall not be allowed within the protected zone. The fencing shall remain in place until all construction activities are complete. The trees or groups of trees to be fenced shall be indicated in a written report prepared subject to approval by the City of Gilroy Planning Division.	City of Gilroy	City of Gilroy Planning Division
12	Prior to commencement of construction activities, the city shall arrange for a qualified biologist to inform workers of the potential presence of the all special-status species, their protected status, work boundaries, and measures to be implemented to avoid loss of these species during construction activities.	City of Gilroy	City of Gilroy Planning Division
16	Prior to the commencement of construction activities, a plan shall be prepared to allow a prompt and effective response to any accidental spills, and all workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur, subject to approval by the City of Gilroy Engineering Division. This plan shall specify that all staging areas and all fueling and maintenance of vehicles and other equipment shall occur at least 100 feet from the riparian habitat and Uvas Creek.	City of Gilroy	City of Gilroy Engineering Division
17	Prior to approval of construction plans, guidelines shall be established for the prevention of contamination of the creek by pesticides, herbicides, fungicides, and fertilizers from maintenance of the athletic fields, subject to the review and approval of the City of Gilroy Engineering Division. The guidelines shall include a requirement for oil/grease separators to be installed in on-site storm drain systems and sweeping programs to be implemented for parking lots.	City of Gilroy	City of Gilroy Engineering Division

The following mitigation measure shall be implemented **prior to commencement of trail construction activities**:

Mitigation Measure Number	Nature of Mitigation	Party Responsible for Implementation	Party Responsible for Monitoring
7	Prior to commencement of trail construction activities the City of Gilroy Planning Division shall have a qualified biologist prepare a Habitat Mitigation Plan for approval by the City of Gilroy and the California Department of Fish and Game. The Habitat Mitigation Plan shall identify the exact amount and location of impacted and replacement habitat, and shall specify the use of locally-obtained native riparian species. Any loss of riparian woodland vegetation resulting from Uvas Creek trail construction activities shall be mitigated on-site within the 50-foot (minimum) habitat buffer at a minimum 3:1 replacement ratio.	City of Gilroy	City of Gilroy Planning Division

The following mitigation measures shall be implemented **prior to commencement of bridge construction activities**:

Mitigation Measure Number	Nature of Mitigation	Party Responsible for Implementation	Party Responsible for Monitoring
8	Prior to the commencement of bridge construction activities, a Section 1603 Streambed Alteration Agreement shall be obtained from the California Department of Fish and Game. Compliance with this mitigation measure may include, but not be limited to, the following: • Bridge construction work shall be initiated and completed during the summer and fall months when this portion of the creek is dry, or at least has a very low flow. Typically, no construction work shall be allowed in the creek between October 15 and early June. • From June to October 15, when construction is allowed, if any water is flowing in the creek, the flow shall be diverted into an open, gravel-lined bypass channel for the duration of the bridge construction work.	City of Gilroy	CA Dept. of Fish and Game

9	Prior to commencement of bridge construction activities the City shall contact the U.S. Army Corps of Engineers to determine who has jurisdiction over the bridge construction activities and if a permit is required for bridge construction.	City of Gilroy	U.S. Army Corps of Engineers
10	Prior to commencement of construction activities, siltation fencing or hay bales shall be installed along portions of Uvas Creek within 100 feet of construction and/or staging areas, or other erosion control measures shall be implemented to prevent sediment from filling the creek, subject to approval by the City of Gilroy Engineering Division.	City of Gilroy	City of Gilroy Engineering Division

The following mitigation measures shall be implemented **during construction activities:**

Mitigation Measure Number	Nature of Mitigation	Party Responsible for Implementation	Party Responsible for Monitoring
14	Subject to the review of the City of Gilroy Planning Division, a qualified biologist shall monitor the project site during construction activities within 100 feet of Uvas Creek. If California red-legged frog, foothill yellow-legged frog, western spadefoot toad, California tiger salamander, and/or western pond turtle turtles are observed at the site, construction activities shall be halted and the USFWS shall be contacted for further assistance.	City of Gilroy	City of Gilroy Planning Division
15	All food-related trash items shall be enclosed in sealed containers and regularly removed from the project area to deter attraction of potential predators of the California red-legged frog, foothill yellow-legged frog, western spadefoot toad, California tiger salamander, and western pond turtle. Pets shall not be allowed on the construction site. The proper location of the trash containers shall be subject to the review and approval of the City of Gilroy Community Development Department.	City of Gilroy	City of Gilroy Community Development Department

The following mitigation measures shall be implemented **concurrent with improvements to Monterey Frontage Road**:

Mitigation Measure Number	Nature of Mitigation	Party Responsible for Implementation	Party Responsible for Monitoring
23	The City of Gilroy shall include a Class 1 path on the west side or Class II bicycle lanes on both sides of Monterey Frontage Road as a part of the design and construction of improvements to Monterey Frontage Road between Monterey Street and the sports park access road. The path or bicycle lanes shall be constructed at the same time as other planned improvements to these roads are made, subject to the review and approval of the City of Gilroy Engineering Division.	City of Gilroy	City of Gilroy Engineering Division

The following mitigation measures shall be implemented **prior to completion of Phase IV of the sports park**:

Mitigation Measure Number	Nature of Mitigation	Party Responsible for Implementation	Party Responsible for Monitoring
20	Prior to completion of Phase IV of the proposed project the City of Gilroy shall install a traffic signal at the intersection of Monterey Street and Monterey Frontage Road. The minimum lane configuration shall be: • Southbound Approach - one left-turn lane, one through lane, one shared through/right-turn lane; • Westbound Approach - one shared lane for all movements; • Northbound Approach - one left-turn lane, one through lane, one shared through/right-turn lane; • Eastbound Approach - one shared lane, one left-turn lane for all movements. Protected left-turn phasing shall be provided for the northbound and southbound approach, while a single signal phase shall be provided to serve the eastbound and westbound approaches.	City of Gilroy	City of Gilroy Engineering Division
24	Prior to completion of Phase IV of the proposed project the City of Gilroy shall construct a minimum 6-foot wide sidewalk along the west side of Monterey Frontage Road and a minimum 10-foot wide sidewalk along Monterey Street between Thomas Road–Luchessa Avenue and the sports park access road.	City of Gilroy	City of Gilroy Engineering Division

Gilroy Sports Park
and Urban Service Area Amendment

Draft Environmental Impact Report

SCH # 98102079

Prepared for:

City of Gilroy
7351 Rosanna Street
Gilroy, California 95020
(408) 846-0440
Mr. William A. Headley, Jr.
Facilities and Parks Development Manager

February 1999

Prepared by:

EMC Planning Group Inc.

99 Pacific Street, Suite 155F
Monterey, California 93940
Phone: (831) 649-1799
Fax: (831) 649-8399
E-Mail: emcgroup@emcplanning.com

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Summary

Proposed Project

The proposed project consists of three primary components: an Urban Service Area amendment request to Santa Clara County Local Agency Formation Commission (LAFCO) and annexation to the City of Gilroy; approval of a Park Master Plan and development of the Gilroy Sports Park and commercial recreation building; and construction of off-site improvements including the extension of the Uvas Creek Trail from Thomas Road—Luchessa Avenue south to Gavilan Community College (including a pedestrian/bicycle bridge over Uvas Creek), extension of the City's recycled water distribution line to the sports park, and roadway improvements.

The project site is located on the south end of Gilroy at the southwest corner of Monterey Street and Thomas Road—Luchessa Avenue. It is bordered by Thomas Road—Luchessa Avenue to the north, Uvas Creek and Farman Lane to the south, Monterey Street and Monterey Frontage Road to the east, and Uvas Creek to the west. Surrounding land uses are residential (single-family and rural), commercial (hotels under construction), and agricultural (row crops and greenhouses). U.S. Highway 101 is located to the east of the project site.

The entire 133.2-acre project site is proposed for inclusion into the City' s Urban Service Area, and annexation to the City. This would include the 78.4-acre sports park site and 54.8 acres of adjacent parcels to the east and north. The sports park is the only project proposed for development at this time within the Urban Service Area amendment request. The adjacent parcels are not proposed for development. This EIR assumes these parcels will remain in open space. Any proposed development on these parcels will require further environmental review.

Preliminary plans for the proposed sports park include the following components: recreational play fields (eight softball diamonds and four soccer fields and concession/restrooms); premier play fields (one 90-foot baseball diamond, two Little League diamonds and one soccer field and concession/restrooms); competition play fields (one softball/baseball diamond and one soccer field and concessions and restrooms); 8.8 acres of park preserve with family picnic, concessions and restrooms, volleyball and bocci ball courts, horseshoe pits and play area; commercial recreation building (indoor soccer, roller hockey, community building, storage); corporation yard; parking (1,043 spaces); and a night watch park ranger station. Soccer fields overlay baseball/softball fields. Football may also be played on the soccer fields. The athletic fields would have lighting for night games, a public address system and seating. The sports park and related off-site improvements would be constructed in phases over a 20-year period.

Summary of Impacts and Mitigation Measures

Pursuant to CEQA Guidelines section 15063 an initial study was prepared to determine the potentially significant effects of the proposed project. The initial study determined that certain issues would have a potentially significant impact on the environment. These issues concerned agricultural considerations, geology, hydrology, public services and service systems, biological resources, transportation/circulation, air quality, noise, archaeological resources, and aesthetics. The initial study determined that there would be a less than significant impact concerning population and housing and energy. Those issues determined to have a potentially significant environmental impact were studied in greater depth in this EIR. Environmental impacts and proposed mitigation measures for the proposed project are presented in Table S-1.

Summary of Other CEQA Considerations

Unavoidable Significant Adverse Environmental Impacts

An unavoidable significant adverse environmental impact is a significant adverse impact that cannot be reduced to a less than significant level through the implementation of mitigation measures. CEQA Guidelines section 15093 requires that a lead agency make findings of overriding considerations for unavoidable significant adverse environmental impacts before approving a proposed project.

The loss of prime farmland is generally considered a significant and unavoidable adverse environmental impact. The proposed project would result in the loss of the 133.2 acres of prime farmland (though some of this land is used for commercial and residential farm-related uses). The establishment of the Gilroy Agricultural Lands Area by both the City of Gilroy and the County of Santa Clara serves as a regional mitigation for losses of prime farmland in southern Santa Clara County, outside of the agricultural lands area. Although this regional mitigation has been implemented, it does not reduce the loss of prime farmland to a less than significant level and the proposed project would still be considered to have a significant and unavoidable impact on prime farmland.

Cumulative Impacts

Cumulative impacts are those environmental impacts resulting from the cumulative effects of approved but not yet built projects and probable projects in the area of the proposed project. Cumulative impacts were based on projects in the southern part of Gilroy. Cumulative impacts were identified concerning agricultural considerations, hydrology, transportation/circulation and air quality.

Agricultural Considerations

The proposed project would add 133.2 acres of prime farmland to the City of Gilroy Urban Service Area. Land within the Urban Service Area is generally expected to be developed within an approximate five-year timeframe. Prime farmland is a non-replaceable resource. Each cumulative project that involves the conversion of prime farmland to non-agricultural uses contributes to the depletion of this resource.

Hydrology

Development of previously undeveloped land results in the covering of permeable soil with impermeable pavement and structures. The proposed project along with other proposed development will result in an increase in the amount of currently permeable land that is covered by impermeable surfaces. Under certain weather conditions increases in the amount of area covered in impervious materials can result in increased rates of storm water run-off into streams. The increased rate of storm water run-off can result in higher flows in streams, in a more rapid rise in streams' water levels and can potentially result in local or widespread flooding in areas adjacent to the stream. However, during flood conditions it is likely that the increase in run-off would be less than significant because under these conditions run-off from pervious surfaces is typically high also.

Transportation/Circulation

A traffic impact assessment prepared for the proposed project determined that the increase in traffic associated with the proposed project and other proposed or existing development would result in traffic congestion at one intersection. The cumulative conditions level of service at the intersection of Monterey Street and Monterey Frontage Road would be below the standards prescribed by the *City of Gilroy General Plan*. A mitigation measure in Section 2.6 Transportation/ Circulation would require the installation of a signal light at this intersection prior to completion of Phase IV of the proposed sports park. With implementation of this mitigation measure the proposed project would not result in a significant cumulative traffic impact.

Air Quality

The San Francisco Bay Area is designated by the U.S. EPA as a non-attainment area for the national ozone standard. The region has had recent violations of the national ambient air quality standard for ozone. The State Implementation Plan (SIP), a compilation of plans and regulations that govern how the region compiles with the Federal Clean Air requirements is being revised. The 1999 SIP will identify how the region will attain the national air quality standard for ozone in the future. The addition of the vehicular trips and associated emissions from the proposed project and other proposed and existing development in the area would contribute to cumulative air quality impacts in a non-attainment area.

Significant Irreversible Environmental Changes

The proposed project would result in the permanent loss of prime agricultural land. While this loss is mitigated in part by the establishment of the Gilroy Agricultural Lands Area, the prime agricultural land lost to the proposed project is not replaceable. The loss of prime agricultural land would be a significant irreversible change.

Growth Inducing Impacts

Growth inducement generally refers to the likelihood that a proposed project will foster growth in the surrounding area, either directly or indirectly. The most common factor in fostering growth is the removal of obstacles to population or economic growth.

The proposed project would require the extension of a recycled water distribution line. Recycled water is used primarily for irrigation of large park or open space areas, and extension of this line would not be likely to induce concentrated urban growth. All other infrastructure is currently available near the project site.

The project site is currently within the City of Gilroy 20-year development area. The proposed project would transfer the project site into the Urban Service Area. Development within Urban Service Areas is generally expected to occur within an approximate five-year timeframe. Development of those parcels that are not part of the proposed sports park could be hastened by the development of the sports park. The proposed project could have growth inducing impacts on the project site and possibly on adjacent areas.

Summary of Alternatives Analysis

Four alternatives to the proposed project were analyzed to determine if they would achieve project objectives while minimizing environmental impacts. The " No Project" alternative would maintain the area in its current use and no Urban Service Amendment, annexation or sports park and related development would take place. Three alternative locations were also studied: Santa Teresa Boulevard at State Highway 152; Santa Teresa Boulevard and Miller Avenue; and Monterey Road at Bolsa Road.

The "No Project" alternative is the environmentally superior alternative, because it eliminates the unavoidable significant impact of loss of prime farmland. However, the "No Project" alternative does not achieve project objectives of providing the community with additional athletic fields and parkland. The proposed project has beneficial biological impacts that would not be achieved with the "No Project" alternative. The remaining alternatives and the proposed project are all

approximately equal in terms of their environmental impacts, and the selection of one alternative as the environmentally superior is based on very fine shades of interpretation.

Though very close to the other remaining alternatives and the proposed project in terms of its environmental effects, the Santa Teresa Boulevard and Miller Avenue alternative is the environmentally superior alternative among the remaining alternatives. The principal factor that favors this alternative is its reduced impact on prime farmland compared to the other alternative locations. However, this alternative may result in traffic impacts that could be difficult to mitigate.

TABLE S-1

Summary of Impacts and Mitigation Measures

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Agricultural Considerations	**Loss of Prime Farmland.** Development of the sports park would result in the loss of 78.4 acres of prime farmland identified in the Farmland Mapping and Monitoring Program over the 20-year build-out of the proposed sports park. **Loss of Prime Farmland** Approval of the Urban Service Area amendment and development of parcels adjacent to the sports park site could ultimately result in the loss of the remaining 54.8 acres of designated farmland within the project site.	**Unavoidable Significant**	N/A	The establishment of the Gilroy Agricultural Lands Area by both the City of Gilroy and the County of Santa Clara serves as a regional mitigation for losses of prime farmland in southern Santa Clara County outside of the agricultural lands area. Although this regional mitigation has been implemented, it does not reduce the loss of prime farmland to a less than significant level and the proposed project would still be considered to have a significant and unavoidable impact on prime farmland.	**Unavoidable Significant**
Agricultural Considerations	**Conflict With Williamson Act Contract.** Four of the parcels on the project site were under Williamson Act contract. Notices of non-renewal were filed and the contracts expired January 1, 1999.	**No Impact**	N/A	None Required	**No Impact**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Agricultural Considerations	**Effect on Adjacent Agricultural Uses.** Implementation of the proposed project would not affect agricultural operations off the project site.	**No Impact**	N/A	None Required	**No Impact**
Geology	**Seismic Hazards.** The proposed project exposes people or structures to a small risk of potential substantial adverse effects involving seismic hazards.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Hydrology	**Storm Water Run-off.** Storm water run-off from access roads, parking lots and pathways could increase the rate of storm water discharge into Uvas Creek and the Pajaro River drainage during some weather conditions.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Hydrology	**On-Site Flood Flowage.** SCVWD holds a flood flowage easement that restricts land use and development on a large portion of the project site. Inappropriate development within this easement could put structures at risk of damage and people at risk of injury or death from storm-related flooding.	**Potentially Significant**	1	The City shall have a hydrology report prepared for the project by a qualified hydrologist or engineer, to address hydrology-related design requirements for the project site and buildings.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Hydrology	**Surface Water Quality.** During construction, grading will expose sediments to rain or wind erosion and subsequent transportation of sediments to the Uvas Creek, Pajaro River and Monterey Bay. Materials used and wastes generated during construction would degrade water quality also. Development of the project would generate non-point source pollutants from newly established urban activity at the project site.	**Significant**	2 3	The City shall submit a Notice of Intent and detailed engineering designs to the Central Coast Regional Water Quality Control Board, and implement a Storm Water Pollution Prevention Plan that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site. The City shall submit plans for review by, and obtain an approved permit from the Santa Clara Valley Water District.	**Less than Significant**
Public Services and Service Systems	**Construction of New Infrastructure.** The proposed project does not require substantial extensions or upgrades to the existing potable water supply, wastewater or storm drain infrastructure.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Public Services and Service Systems	**Water Supply.** The proposed project would result in a minimal increase in demand for potable water. The proposed project would increase demand for recycled water for irrigation.	**No Impact**	N/A	None Required	**No Impact**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Public Services and Service Systems	**Police and Fire Services.** The proposed project does not result in the need for additional facilities for the provision of police or fire services.	**No Impact**	N/A	None Required	**No Impact**
Biological Resources	**Loss of Habitat.** Due to continuous human interaction, agricultural fields typically provide little habitat for wildlife and do not represent a significant biological resource.	**No Impact**	N/A	None Required	**No Impact**
Biological Resources	**Riparian Buffer.** The proposed 50-foot habitat buffer will substantially increase the amount of native habitat along Uvas Creek.	**Beneficial**	N/A	None Required	**Beneficial**
Biological Resources	**Invasive Plant Species.** The riparian habitat along Uvas Creek could be affected by the presence of non-native, invasive plant species.	**Significant**	4	Project plans shall include a habitat buffer designed to include appropriate native plant species and shall not include plantings of non-native, invasive plant species. Wherever possible, the east side of the trail shall be planted with native grasses or other native species to provide additional native habitat.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Loss of Significant Trees.** Some of the trees along the north side of Thomas Road–Luchessa Avenue, along the north side of Mesa Road, and through the riparian habitat leading to and from the proposed pedestrian bridge may be considered "significant" trees that might be removed or injured during construction activities.	**Potentially Significant**	5 6	A field survey shall be conducted to determine the number type, size and location of any potentially significant tree to be removed. The protected zone (one to 1.5 times the distance from the trunk to the dripline, depending on the tree species) of any trees or groups of trees to be retained shall be fenced to prevent injury to the trees during construction.	**Less Than Significant**
Biological Resources	**Riparian Habitat.** Construction of the pedestrian bridge over Uvas Creek could disturb riparian woodland habitat.	**Potentially Significant**	7	A Habitat Mitigation Plan shall be prepared to identify the exact amount and location of impacted and replacement habitat, and shall specify replacement specifications for any removed habitat.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Riparian Habitat.** Construction of the pedestrian bridge over Uvas Creek could introduce fill material into the creek and/or increase turbidity in the creek and interfere substantially with the movement of steelhead as well as other fish and aquatic wildlife.	**Significant**	8	A Section 1603 Streambed Alteration Agreement shall be obtained from the California Department of Fish and Game. Construction activities in or adjacent to Uvas Creek to occur when the creek is dry or has a very low flow (generally June through October 15).	**Less Than Significant**
			9	The City shall contact the U.S. Army Corps of Engineers to determine who has jurisdiction over the bridge construction activities and if a permit is required for bridge construction.	
			10	Erosion control measures shall be installed along portions of Uvas Creek to prevent sediment from filling the creek.	

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Burrowing Owls.** Construction activity along the slope of the levee in the northwest corner of the project site, could result in the direct loss of burrowing owl nests, including eggs and young, or the abandonment of an active nest by the adults.	**Potentially Significant**	11	Field surveys shall be conducted to determine if burrowing owls are present in the construction zone or within 250 feet of the construction zone if any construction would occur during the nesting and/or breeding season of burrowing owls potentially nesting in the area (February 1 through August 31) and/or during the winter residency period (December 1 and January 31). If active nests are found, a burrowing owl habitat mitigation plan shall be prepared.	**Less Than Significant**
			12	The City shall arrange for a biologist to inform workers of the potential presence of special-status wildlife and measures to be implemented to avoid loss of these wildlife during construction activities.	

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Raptors.** Construction activities in or near the riparian woodland habitat found along Uvas Creek could result in the direct loss of white-tailed kite, northern harrier, Cooper's hawk, and short-eared owl nests, including eggs and young, or the abandonment of an active nest by the adults..	**Potentially Significant**	12 13	See above. A field survey shall be conducted by a qualified biologist to determine if active raptor nests are present in the construction zone or within 250 feet of the construction zone if any construction would occur during the nesting and/or breeding season of raptors potentially nesting in the areas proposed for development (generally March 1 through August 1). If active nests are found, at the discretion of the biologist, clearing and construction within 250 feet shall be postponed or halted until the nests are vacated and juveniles have fledged and there is no evidence of a second attempt at nesting.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Amphibians.** Construction activity in or near the riparian woodland habitat found along Uvas Creek could result in the direct and indirect loss of California red-legged frog, foothill yellow-legged frog, western spadefoot toad, California tiger salamander, and western pond turtle. Use of the sports park may result in death or harassment of wildlife by pets and people, consumption by predators attracted to the project site, or death or injury from pesticides.	**Potentially Significant**	8	See above.	**Less Than Significant**
			10	See above.	
			12	See above.	
			14	A biologist shall monitor the project site during construction activities within 100 feet of Uvas Creek. If California red-legged frog, foothill yellow-legged frog, western spadefoot toad, California tiger salamander, and/or western pond turtle turtles are observed at the site, construction activities shall be halted and the United States Fish and Wildlife Service shall be contacted for further assistance.	
			15	All food-related trash items shall be enclosed in sealed containers and regularly removed from the project area to deter attraction of potential predators Pets shall not be allowed on the construction site.	

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Habitat Disturbance During Construction.** Accidental spills of contaminants or other harmful materials, such as diesel fuel or oil, from construction vehicles could spread into the riparian woodland habitat and Uvas Creek and harm or kill wildlife. During use of the sports park, Uvas Creek could be contaminated by pesticides, fertilizers, and similar substances.	**Potentially Significant**	2 3 16 17	See above. See above. A plan shall be prepared to allow prompt response to any accidental spills, and inform workers of the importance of preventing spills and of the appropriate measures to take in case of a spill. Guidelines shall be established for the prevention of contamination of the creek by pesticides and fertilizers from maintenance of the athletic fields.	**Less Than Significant**
Biological Resources	**Habitat Disturbance During Recycled Water Line Construction.** Construction activity could produce erosion or accidental spills of contaminants that could decrease habitat quality and interfere with the movement or well-being of wildlife.	**Potentially Significant**	10 16	See above. See above.	**Less Than Significant**
Biological Resources	**Effects of Nighttime Lighting on Wildlife.** Nighttime lighting of the sports park play fields could spill over into the riparian woodland habitat and disturb wildlife, restrict the movement or activity of wildlife, or facilitate increased predation of wildlife.	**Potentially Significant**	18	A lighting plan for the sports park shall be developed requiring all lighting in the western portion of the sports park to be directed away from the riparian habitat, prohibiting lighting along the Uvas Creek Trail; and generally restricting lighting after 11:00 PM.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Domestic Activities.** People and unleashed pets wandering off the Uvas Creek Trail could restrict the movement or activity of and/or disturb or kill wildlife	**Potentially Significant**	19	A signage plan for the sports park shall be prepared to outline the language, number and location of signs to dissuade people from straying off the Uvas Creek Trail and to prohibit unleashed dogs on the Uvas Creek trail.	**Less Than Significant**
Transportation Circulation	**LOS Below City Standards.** With completion of Phase V of the proposed sports park the intersection of Monterey Street and Monterey Frontage Road would be congested.	**Significant**	20	Prior to completion of Phase IV of the proposed sports park the City of Gilroy shall install a traffic signal and make lane improvements to at the intersection of Monterey Street and Monterey Frontage Road.	**Less Than Significant**
Transportation Circulation	**State Highway Traffic.** The proposed sports park would not cause congestion on nearby freeway segments.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Transportation Circulation	**Bicyclist and Pedestrian Safety.** The proposed design of the temporary alignment of the Uvas Creek Trail crossing of Thomas Road–Luchessa Avenue would result in a potential safety hazard to users of the trail.	**Significant**	21	The Uvas Creek Trail extension shall connect by direct route to Thomas Road–Luchessa Avenue at Princevalle Street via a built-up earth ramp on the levee's north embankment.	**Less Than Significant**
Transportation Circulation	**Bicyclist and Pedestrian Safety.** The temporary alignment of the Uvas Creek Trail crossing of Thomas Road–Luchessa Avenue would expose trail users to high speed cross traffic.	**Significant**	22	Cross walks shall be installed across Thomas Road–Luchessa Avenue at Princevalle Street and stop signs shall be installed on Thomas Road–Luchessa Avenue at Princevalle Street.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Transportation Circulation	**Bicycle Access.** The project plans do not indicate a bicycle route connection between Monterey Street, a designated bicycle route and the proposed sports park access road.	**Significant**	23	The City shall construct a Class 1 path on the west side or Class II bicycle lanes on both sides of Monterey Frontage Road as a part of the design and construction of improvements to Monterey Frontage Road between Monterey Street and the sports park access road.	**Less Than Significant**
Transportation Circulation	**Pedestrian Access.** Sports park-related traffic increases along Monterey Street and Monterey Frontage Road will present hazardous conditions to pedestrians accessing the proposed sports park.	**Significant**	24	Prior to completion of Phase IV of the proposed project the City of Gilroy shall construct a minimum 6-foot wide sidewalk along the west side of Monterey Frontage Road and a minimum 10-foot wide sidewalk along Monterey Street between Thomas Road–Luchessa Avenue and the sports park access road.	**Less Than Significant**
Transportation Circulation	**Parking Supply.** The proposed sports park would have a shortage of 180 parking spaces at the completion of Phase V.	**Significant**	25	The City of Gilroy shall include in project plans, 180 parking spaces from a later phase to be built prior to completion of Phase V.	**Less Than Significant**
Transportation Circulation	**Internal Circulation.** The transportation impact assessment made recommendations for improvements to internal vehicular circulation at the proposed sports park.	**No Impact**	N/A	None Required	**No Impact**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Air Quality	**Sports Park Operations.** The proposed sports park would result in the emission of various pollutants into the atmosphere. These emissions would be below the thresholds established by the BAAQMD.	Less Than Significant	N/A	None Required	Less Than Significant
Air Quality	**Project Construction.** Construction activities at the project site could result in a significant adverse air quality impact from dust.	Potentially Significant	26	Dust control measures shall be incorporated into all permits for any phase of the project. The measures shall be implemented as necessary to adequately control dust.	Less Than Significant
Noise	**Noise from Park Activities.** Activities at the proposed sports park, including athletic events and traffic entering and exiting the project site would generate noise.	Less Than Significant	N/A	None Required	Less Than Significant
Noise	**Construction Noise.** Construction activities at the project site could result in high levels of noise.	Significant	27	Construction activities shall be limited to specified hours.	Less Than Significant

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Archaeological Resources	Currently unidentified buried cultural resources may be found during construction on the project site.	**Potentially Significant**	28	The city shall contract with a qualified archaeologist to arrange a schedule for monitoring the project site during grading and excavation activities.	**Less Than Significant**
			29	If archaeological resources or human remains are discovered during construction, work shall be halted at a minimum of 200 feet from the find and the area shall be staked off. The project developer shall notify a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented.	
			30	If human remains are found during construction there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of Santa Clara County is contacted to determine that no investigation of the cause of death is required. If the coroner determines the remains to be Native American the coroner shall contact the Native American Heritage Commission within 24 hours.	

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Aesthetics	**Change in Rural Character.** Development of the project site would permanently alter the existing rural character of the area.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Aesthetics	**Nighttime Lighting.** The proposed sports park would introduce a major new source of light to the local area.	**Less Than Significant**	N/A	None Required	**Less Than Significant**

Note: Impacts and Mitigation Measures are summarized in this table. Refer to the text of the Environmental Impact Report for the complete text of the impacts and mitigation measures associated with each area of concern.

Source: EMC Planning Group Inc.

Introduction

1.1 Authorization and Purpose

This environmental impact report (EIR) has been prepared by EMC Planning Group Inc. (hereinafter "consultant") under contract to the City of Gilroy as the lead agency in accordance with the *California Environmental Quality Act* (CEQA) and implementing guidelines. This EIR has been prepared using available information from private and public sources noted herein, as well as information generated by the consultant through field investigation. This EIR will be used to inform public decision-makers and their constituents of the environmental impacts of the proposed project. In accordance with CEQA guidelines, this report describes both beneficial and adverse impacts generated by the proposed project and suggests measures for mitigating significant adverse environmental impacts resulting from the proposed project.

Based upon the decision to prepare an EIR, the city prepared and distributed a notice of preparation (NOP), in accordance with CEQA Guidelines section 15082. CEQA Guidelines section 15375 defines an NOP as:

> ...a brief notice sent by the lead agency to notify the responsible agencies, trustee agencies, and involved federal agencies that the lead agency plans to prepare an EIR for the project. The purpose of the notice is to solicit guidance from those agencies as to the scope and content of the environmental information to be included in the EIR.

The NOP and responses to the NOP received from responsible agencies are contained in Appendix A.

This EIR describes and evaluates the existing environmental setting of the project site and surrounding areas, discusses the characteristics of the proposed project, identifies environmental impacts associated with the proposed project, and provides feasible mitigation measures that can be implemented to reduce or avoid identified adverse environmental impacts. This EIR also evaluates reasonable alternatives to the proposed project.

Where an EIR identifies a significant adverse impact, the lead agency may not approve the project unless it finds that changes to the project or mitigation measures have been required of the project to reduce the impact's significance or that changes are infeasible for specified social, economic, and/or other reasons (Public Resources Code section 21081).

When a mitigation measure is associated with a project impact that is identified as significant in the EIR, the lead agency may not exclude the mitigation measure from the project conditions without making specific findings regarding the omission.

This EIR is a factual, objective public disclosure document that takes no position on the merits of the proposed project. Thus, the findings of this EIR do not advocate a position "for" or "against" the proposed project. Instead, this EIR provides information on which decisions about the proposed project can be based.

The EIR has been prepared according to the professional standards and practices of the EIR participants' individual disciplines and in conformance with the legal requirements and informational expectations of CEQA and its implementing guidelines.

1.2 Project Location

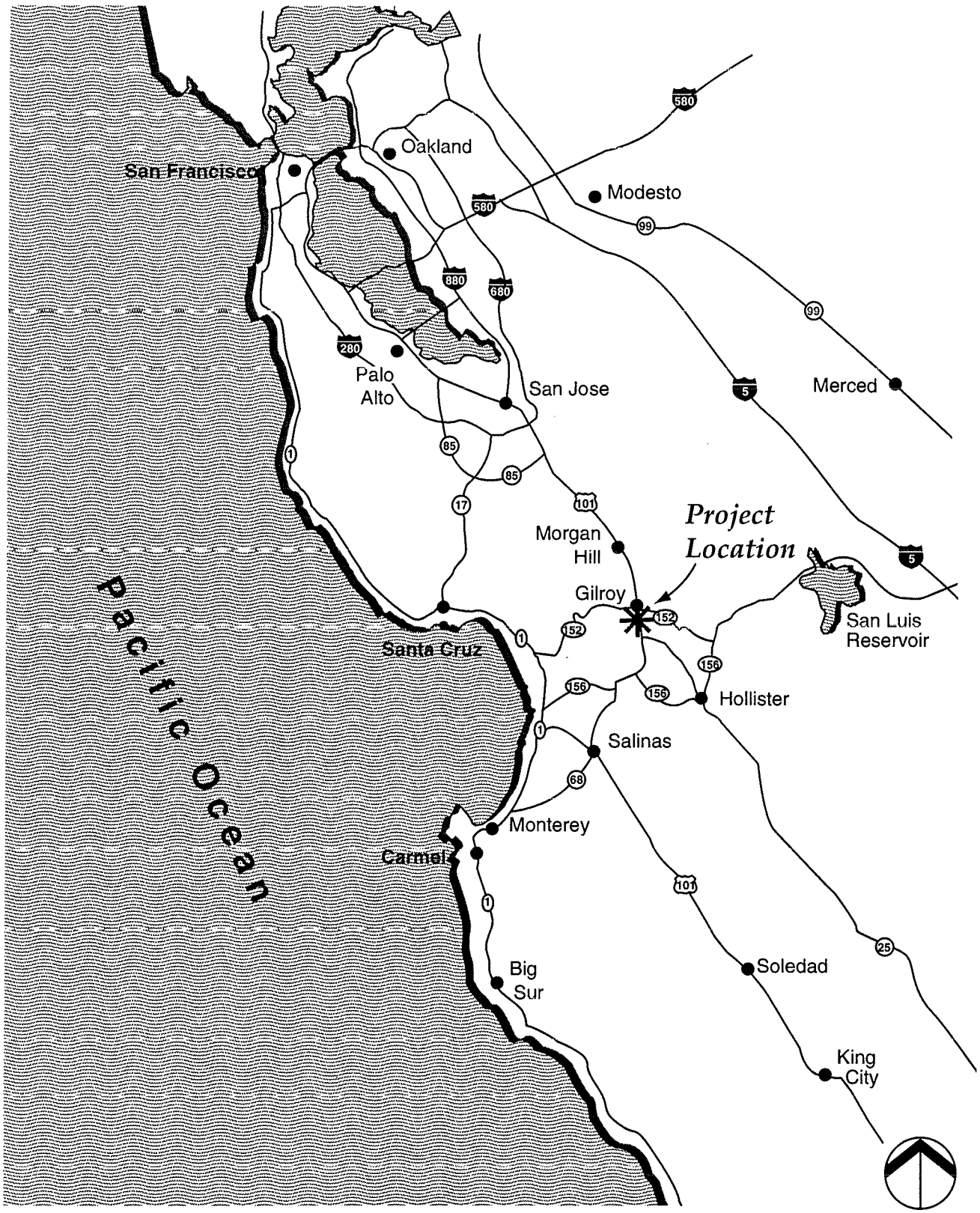
The project site is located immediately south of the City of Gilroy in unincorporated Santa Clara County, approximately 35 miles south of San Jose, 10 miles south of Morgan Hill, and 30 miles northeast of Salinas. Figure 1 illustrates the regional location.

The project site is located at the south end of Gilroy at the southwest corner of Monterey Street and Thomas Road—Luchessa Avenue. It is bordered by Thomas Road—Luchessa Avenue to the north, Uvas Creek and Farman Lane to the south, Monterey Street and Monterey Frontage Road to the east, and Uvas Creek to the west. Surrounding land uses are residential (single-family), commercial (hotels under construction), and agricultural (row crops and greenhouses). U.S. Highway 101 is located to the east of the project site, approximately 300 feet from the south end of the site and approximately 1,100 feet from the north end of the site. Figure 2 illustrates the project vicinity.

1.3 Project Description

Existing Uses and Improvements

The project site is 133.2 acres, located in unincorporated Santa Clara County, immediately south of both the city limits of Gilroy and the Urban Service Area limits. The site is currently in agricultural row-crop production. Four rural residences are located along the site's eastern boundary on Monterey Street and Monterey Frontage Road. A propane gas facility is located at the corner of Monterey Street and Thomas Road — Luchessa Avenue. Uvas Creek is located at the western boundary and a portion of the southern boundary. An earthen flood-control levee was constructed on a portion of the site. It extends from a point approximately 1,100 feet (on-site) south of Thomas Road—Luchessa Avenue to 4,500 feet upstream (and off-site) to Miller Avenue. Approximately 1,800 feet of the levee is on the project site. The levee is set back from the top of the natural creek bank by approximately 50 feet. Photographs of the project site are presented in Figure 3.



Source: California State Automobile Association and EMC Planning Group Inc.

No Scale

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Gilroy Sports Park and USA Amendment EIR

Regional Location

Figure **1**

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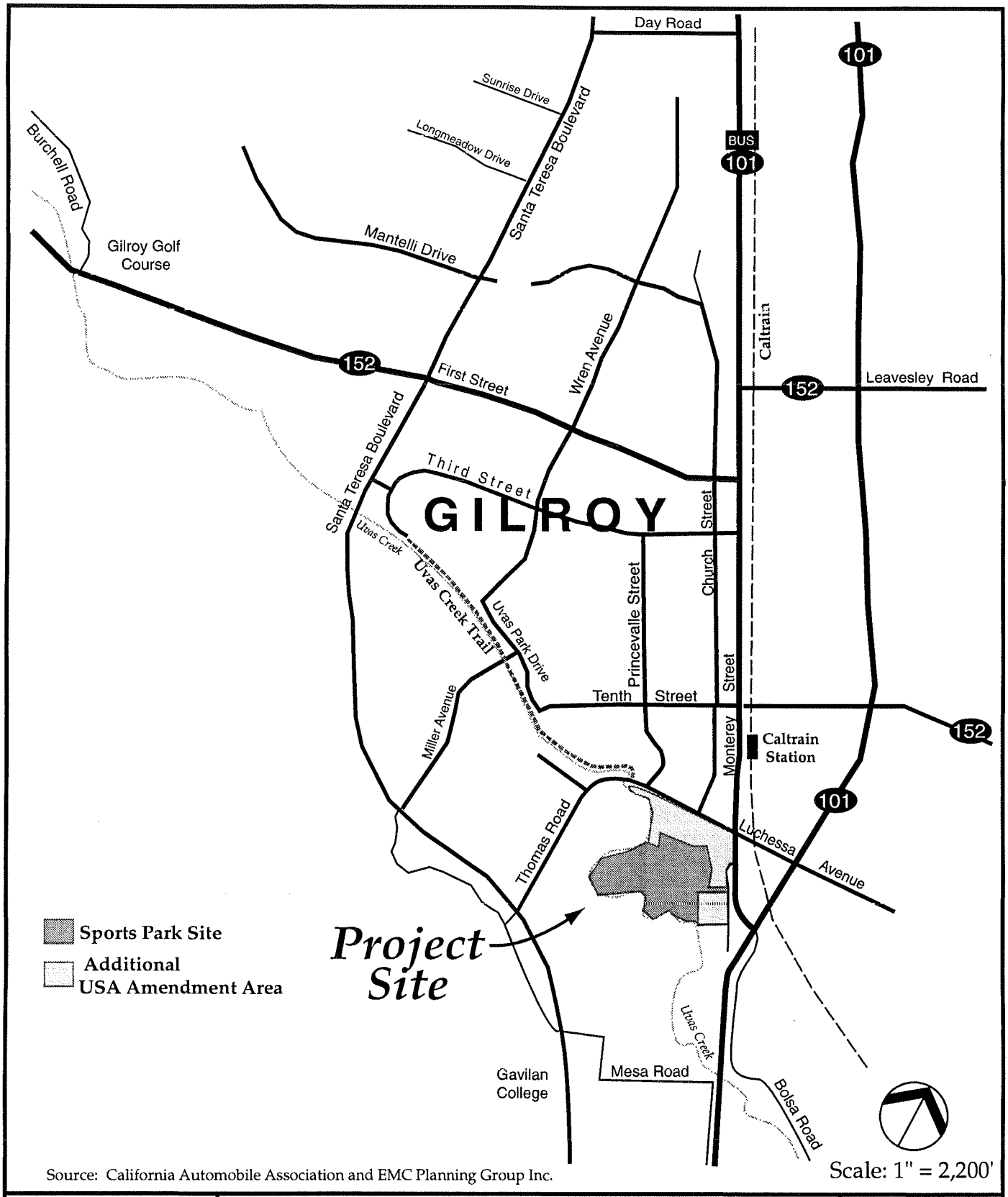

Source: California Automobile Association and EMC Planning Group Inc.

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Project Vicinity

Figure 2

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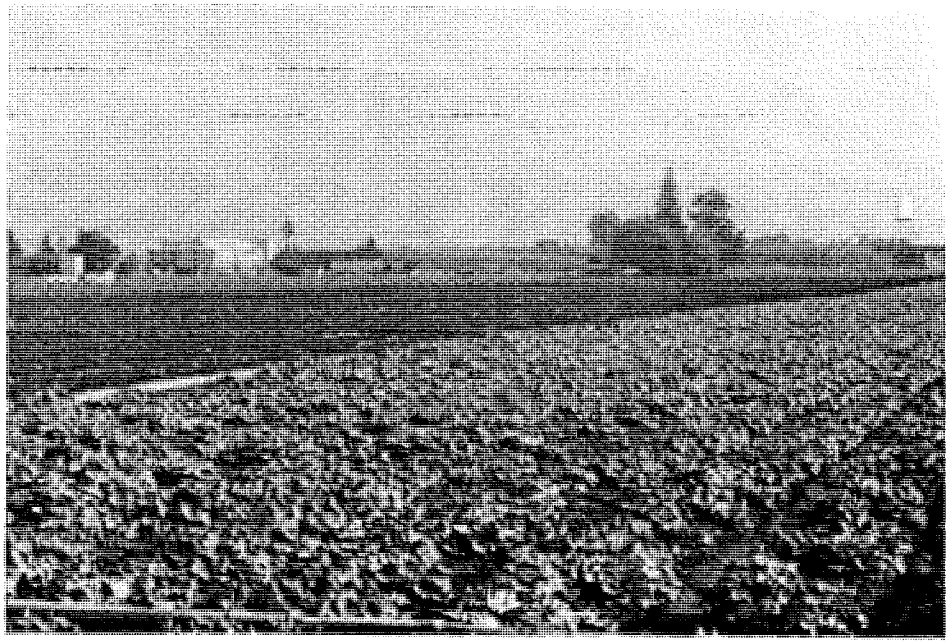

The view east from Uvas Creek.



Thomas Road–Luchessa Avenue and Uvas Creek Levee, looking east.

Source: EMC Planning Group Inc.

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Site Photos

Figure 3

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The *City of Gilroy General Plan* land use designation for the project site is OPEN SPACE and PARK/PUBLIC FACILITY. General Plan land use designations surrounding the site include RESIDENTIAL, COMMERCIAL - GENERAL SERVICES, COMMERCIAL - VISITOR SERVING, AND OPEN SPACE. Figure 4 shows existing land uses and Figure 5 shows General Plan designations for the project site and vicinity.

Proposed Improvements

The proposed project consists of three primary components: an Urban Service Area amendment request to Santa Clara County Local Agency Formation Commission (LAFCO) and annexation to the City; approval of a Park Master Plan and development of the Gilroy Sports Park and commercial recreation building; and construction of off-site improvements including the extension of the Uvas Creek Trail from Thomas Road—Luchessa Avenue south to Gavilan Community College (including a pedestrian/bicycle bridge over Uvas Creek), extension of the city's recycled water distribution line to the sports park, and roadway improvements.

References in this EIR to the "project site" and "proposed project" refer to the entire Urban Service Area amendment proposal. Specific references are made in this EIR to the "proposed sports park" and "sports park site" and the "proposed trail extension" and "trail extension site."

Urban Service Area Amendment Request

The entire 133.2-acre project site is proposed for inclusion into the city' s Urban Service Area, and annexation to the city. This would include the 78.4-acre sports park site and 54.8 acres of adjacent parcels on the east and north. Figure 6 identifies the project site and it's relation to the existing Urban Service Area. Table 1 provides a list of parcels included in the proposal.

The sports park is the only project proposed for development at this time within the Urban Service Area amendment request. A small portion of the sports park site is located adjacent to the existing Urban Service Area boundary along Monterey Frontage Road. However, in an effort to not create an "island", the city has included the adjacent parcels to the north and east in the Urban Service Area amendment request. The adjacent parcels' General Plan land use designation of OPEN SPACE will not be modified at this time. It is unknown what type of development would take place on those parcels or when it would occur.

City of Gilroy General Plan and *Santa Clara County General Plan* policies require that the parcels be annexed to the city prior to development. The City of Gilroy would annex the project site following approval of the Urban Service Area amendment by LAFCO.

Gilroy Sports Park

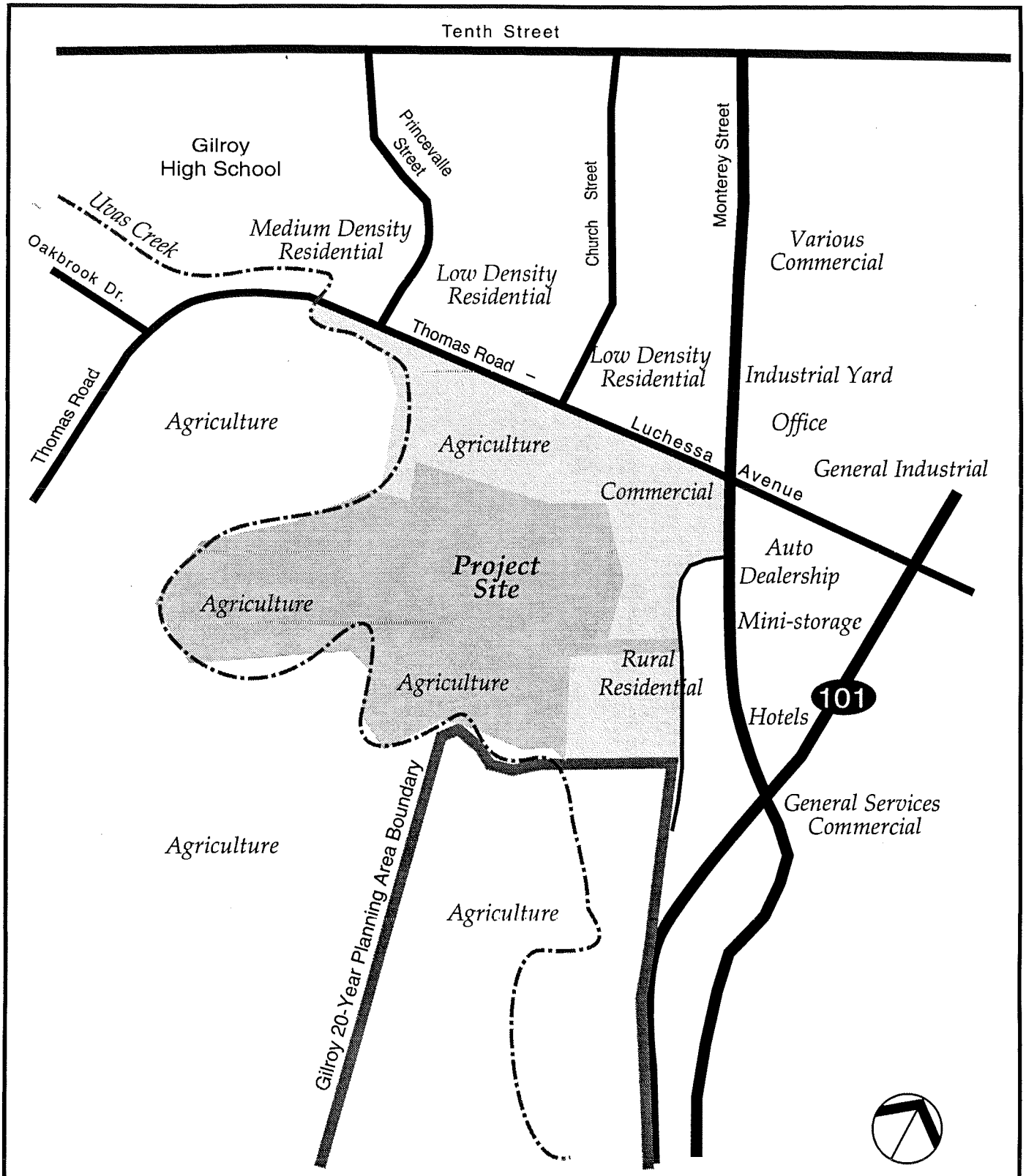
The proposed sports park's preliminary master plan map is presented in Figure 7. The *Gilroy Sports Complex Draft Master Plan*, prepared by the beals group inc. in May 1998 is available for public review at the City of Gilroy Community Development Department. Preliminary plan components include the following: recreational play fields (eight softball diamonds and four soccer fields and concession/restrooms); premier play fields (one 90-foot baseball diamond, two Little League diamonds and one soccer field and concession/restrooms); competition play fields (one softball/baseball diamond and one soccer field and concessions and restrooms); 8.8 acres of park preserve with family picnic, concessions and restrooms, volleyball and bocce ball courts, horseshoe pits and play area; commercial recreation building (indoor soccer, roller hockey, community center, storage); corporation yard; parking (1,043 spaces); and a park ranger station. Soccer fields overlay baseball/softball fields. Football may also be played on the soccer fields. The athletic fields would have lighting for night games, a public address system and seating. The commercial recreation building is proposed to be a mostly open tent-like structure.

TABLE 1

Assessor's Parcels in Amendment Request

Project Component	Assessor's Parcel Number	Acres
Sports Park Area	808-21-030	26.26
	808-21-028	31.53
	808-21-026	20.56
Additional Area	808-21-021	7.00
	808-21-018	0.87
	808-21-016	26.05
	808-21-008	0.10
	808-21-009	0.70
	808-21-031	7.42
	808-21-029	4.70
	808-21-027	6.20
	808-21-013	4.51
	808-21-014	1.35
	808-21-015	32.95
Total		**133.20**

Source: City of Gilroy



Source: California Automobile Association and EMC Planning Group Inc.

Scale: 1" = 1,000'

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Existing Land Uses

Figure 4

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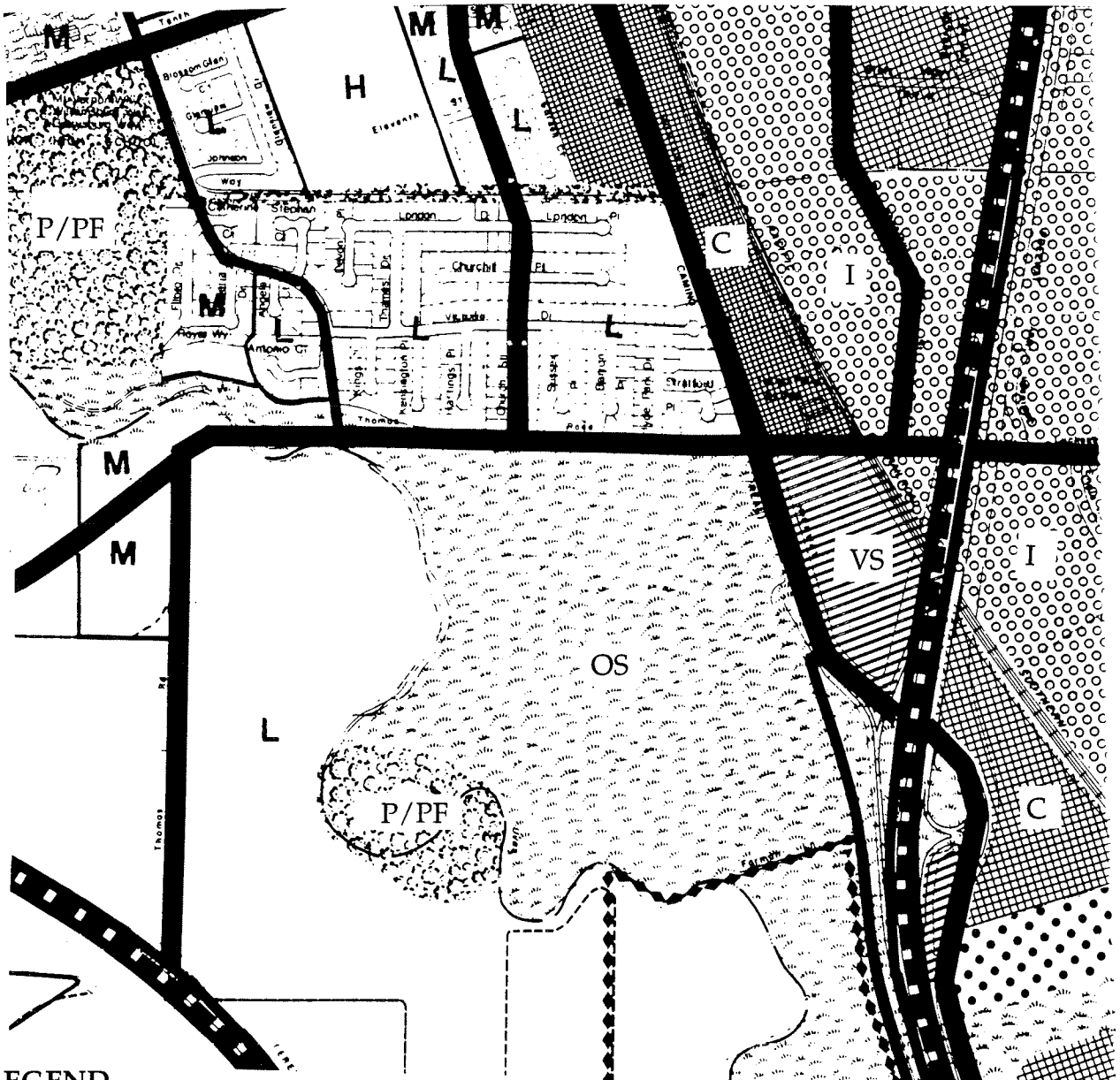

LEGEND

C	COMMERCIAL - GENERAL SERVICES
VS	COMMERCIAL - VISITOR SERVING
L	RESIDENTIAL - LOW DENSITY
M	RESIDENTIAL - MEDIUM DENSITY
I	INDUSTRIAL - GENERAL INDUSTRIAL
OS	OPEN SPACE
P/PF	PARK/PUBLIC FACILITY

Source: City of Gilroy

Scale: 1" = 1,000'

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General Plan Designations

Figure 5

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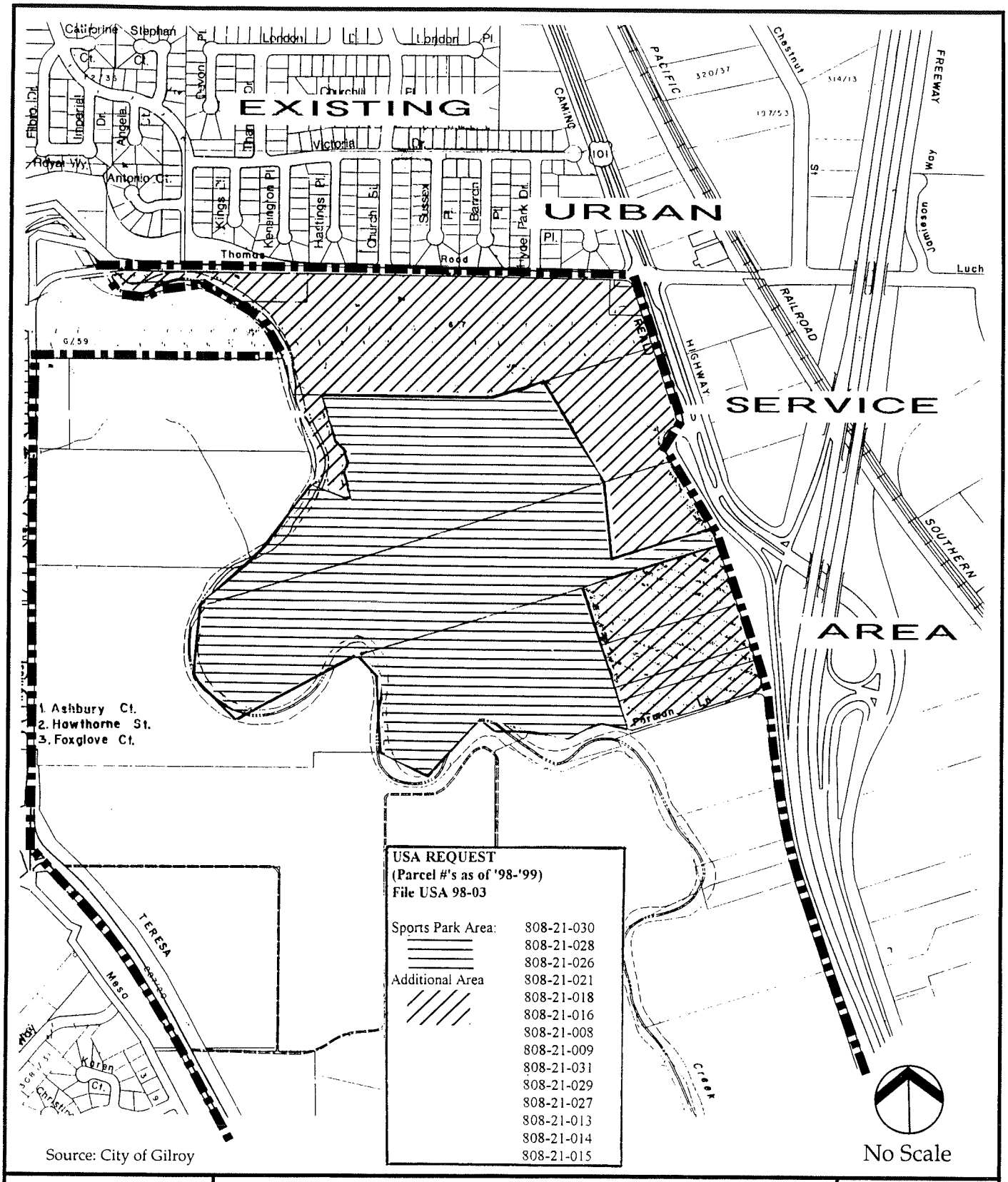

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Project Site and Relation to Existing Urban Service Area

Figure 6

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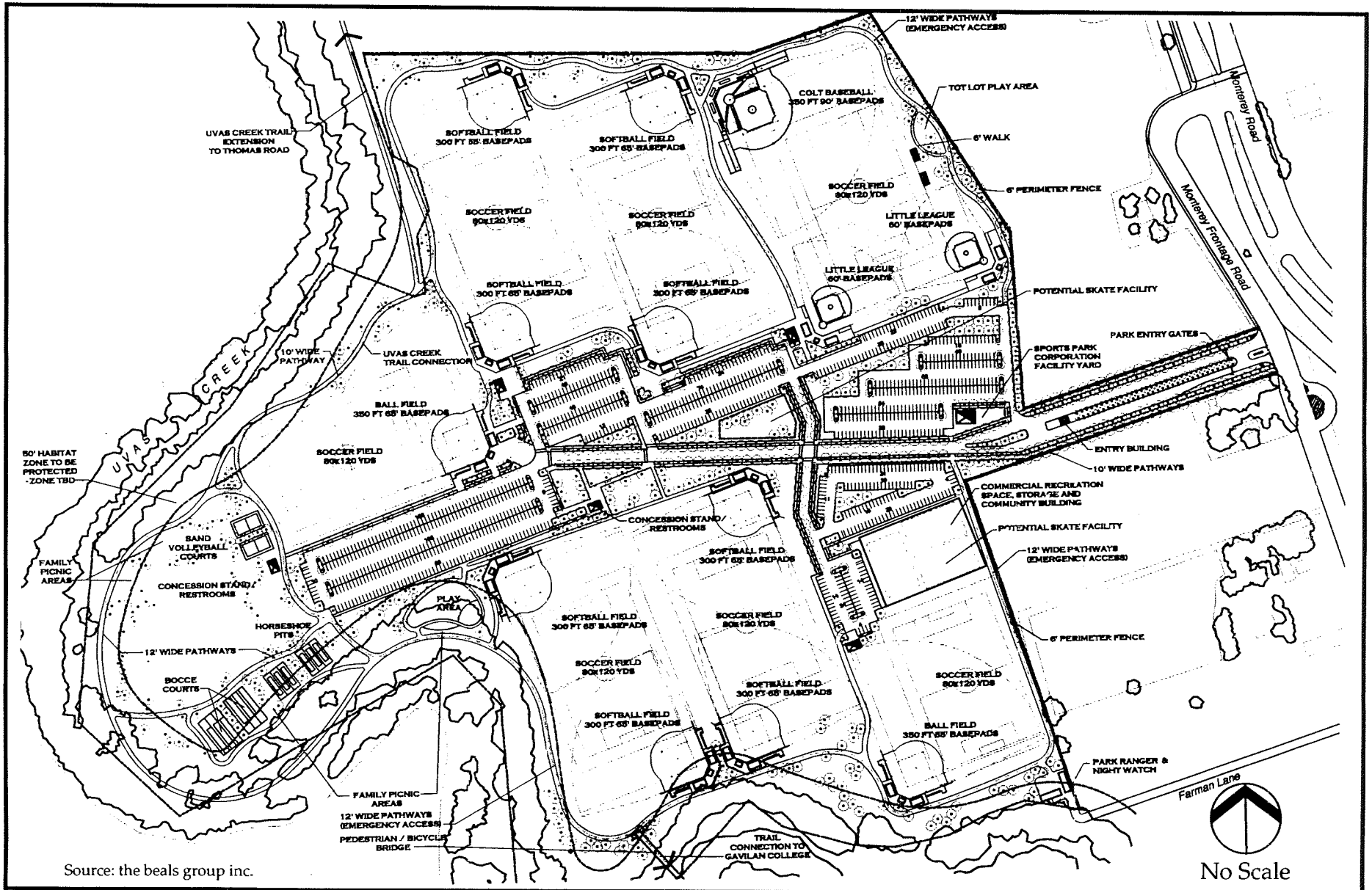

Source: the beals group inc.

No Scale

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Preliminary Master Plan

Figure 7

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The preliminary master plan also includes the following: a 50-foot from top of bank habitat buffer along Uvas Creek to be enhanced with native plantings; walking/bicycle paths throughout the site; a portion of the Uvas Creek Trail; a six-foot high perimeter fence; and entry gates and an entry building at the Monterey Frontage entrance.

The sports park would be developed in nine phases. The proposed phasing plan is summarized in Table 2 and illustrated in Figure 8. Phases are being proposed in sequence of construction from the entrance to the west end of the site for Phases One through Seven. Phases Eight and Nine can occur at any time, and have been separated based on their ability to be constructed independently of the other phases. Based on the experience of other cities of similar size constructing similar projects, the City of Gilroy expects full development of the proposed sports park to take approximately 20 years.

TABLE 2

Gilroy Sports Park Proposed Phasing Plan

Phase Number	Description of Work	Preliminary Projected Cost
I	Utility infrastructure; entrance; corporation yard; Uvas Creek Trail rough grade.	$ 1,814,405
II	Premier Little League area and parking; Uvas Creek Trail extension to Thomas Road.	$ 3,992,025
III	Commercial recreation building infrastructure; multi-use ball field.	$ 1,984,013
IV	North multi-use field area and parking.	$ 3,962,695
V	South multi-use field area and parking.	$ 3,036,954
VI	Premier softball/baseball field area and parking.	$ 1,837,605
VII	Park preserve picnic areas and recreation facilities.	$ 1,557,725
VIII	Monterey Frontage Road improvements.	$ 636,875
IX	Uvas Creek Trail extension to Gavilan Community College.	$ 885,000
Total		**$19,450,279**

Notes:
Projected cost is based on 1998 dollars. All hard and soft costs are included.
The commercial recreation building has not been included in the cost.
The expected timeframe for full development is 20 years. Phases are presented in the order they are anticipated to be built, except that Phases VIII and IX may be built at any time during the overall park development.

Source: the beals group inc.

Development of the sports park would be funded through the city's park development fund, grants and donations. Various user fees and revenue from the commercial recreational facilities are expected to cover a portion of the operating costs.

Off-Site Improvements

Off-site improvements include the extension of the Uvas Creek Trail from Thomas Road—Luchessa Avenue south to Gavilan Community College; extension of the city's recycled water distribution line to the sports park; and roadway improvements.

Uvas Creek Trail Extension. The proposed Uvas Creek Trail extension is illustrated in Figure 9. The existing portion of the Uvas Creek Trail runs from the corner of Uvas Park Drive and Laurel Drive to Thomas Road—Luchessa Avenue. The project's internal trail system would connect to a southward extension of the existing trail. The trail would be further extended to the Gavilan Community College area. A bridge crossing over Uvas Creek would be required and is proposed for the central, southern portion of the project site. The trail would then continue south to Mesa Road where it would turn east to reach the Gavilan Community College campus.

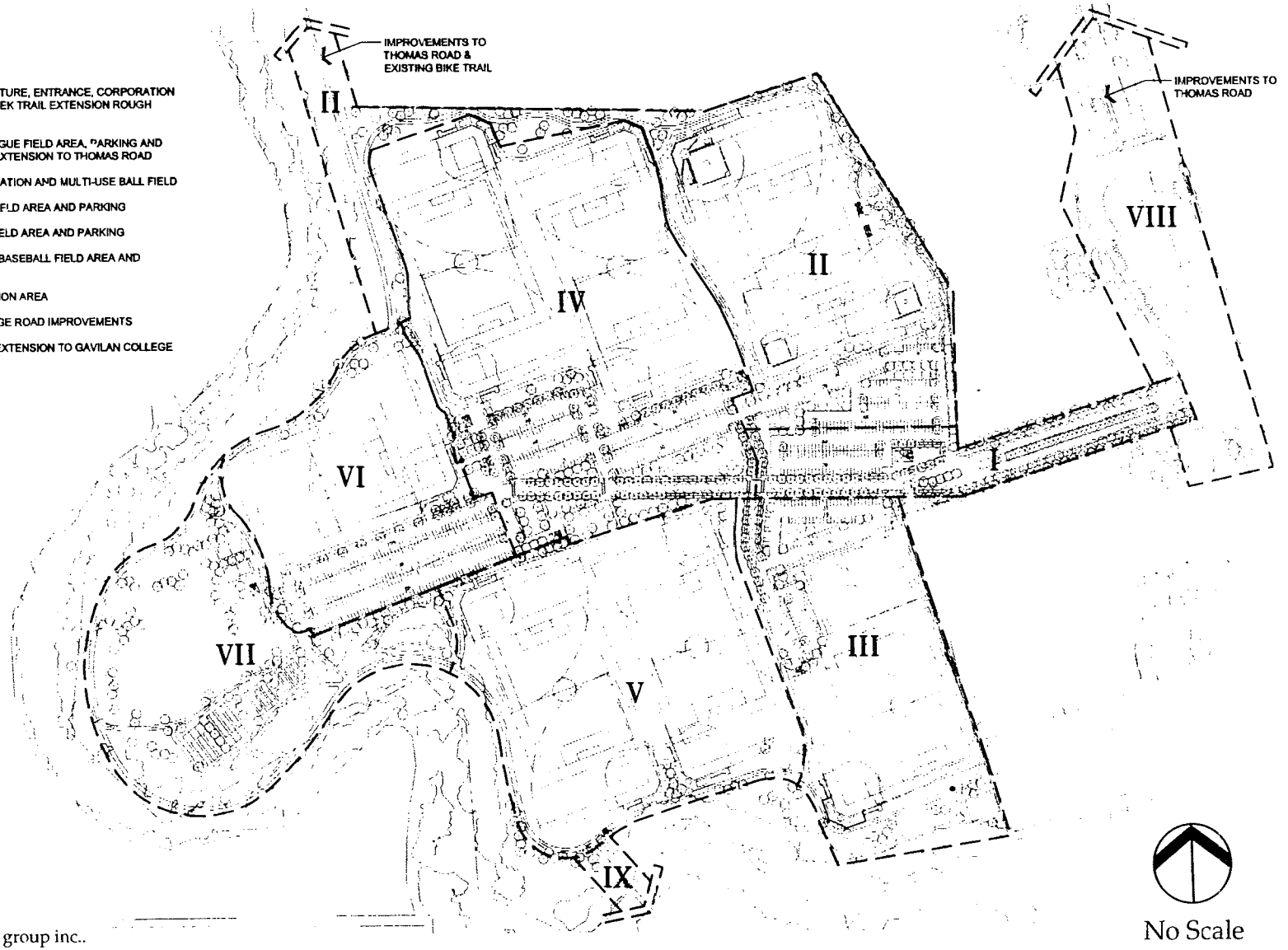
Recycled Water Distribution Line. The city would extend a recycled water distribution line to serve the landscape needs of the sports park. Two routes are under consideration: along the median of Monterey Street, or along the east side of the Uvas Creek levee.

Roadway Improvements. To enable pedestrian traffic, a sidewalk crossing at the intersection of Thomas Road—Luchessa Avenue and Monterey Street, with a ten-foot wide sidewalk continuing southward down to the Monterey Frontage Road has been proposed. There would also be a six-foot wide crosswalk at the Monterey Frontage Road, with appropriate project signs and introduction to the sports park. The crosswalk and intersection of Monterey Street and Monterey Frontage Road would be signalized in the future. This improvement would be based on a demand and use level with traffic/circulation for the sports park. The sidewalk would then continue down the Monterey Frontage Road and into the park itself. The sidewalk would be buffered from the road with shade trees and accent planting.

1.4 Project Objectives

The project is intended to meet the community's existing impacted needs and future growth demand for sports facilities for youth and adult baseball, softball, soccer and football. Several of the fields would be suitable for regional tournament play. Additionally, the sports park would provide informal parkland for picnicking and play, a location for commercial indoor recreation facilities and a community hall.

PHASE	PHASE AREA
I	UTILITY INFRASTRUCTURE, ENTRANCE, CORPORATION YARD AND UVAS CREEK TRAIL EXTENSION ROUGH GRADING
II	PREMIER LITTLE LEAGUE FIELD AREA, PARKING AND UVAS CREEK TRAIL EXTENSION TO THOMAS ROAD
III	COMMERCIAL RECREATION AND MULTI-USE BALL FIELD
IV	NORTH MULTI-USE FIELD AREA AND PARKING
V	SOUTH MULTI-USE FIELD AREA AND PARKING
VI	PREMIER SOFTBALL/BASEBALL FIELD AREA AND PARKING
VII	INFORMAL RECREATION AREA
VIII	MONTEREY FRONTAGE ROAD IMPROVEMENTS
IX	UVAS CREEK TRAIL EXTENSION TO GAVILAN COLLEGE



Source: the beals group inc..

No Scale

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Gilroy Sports Park Phasing Plan

Figure 8

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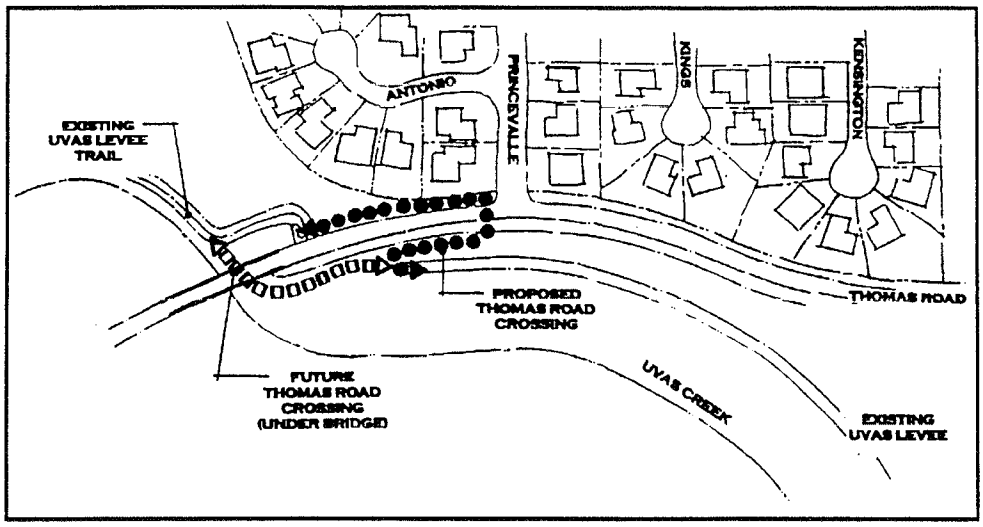
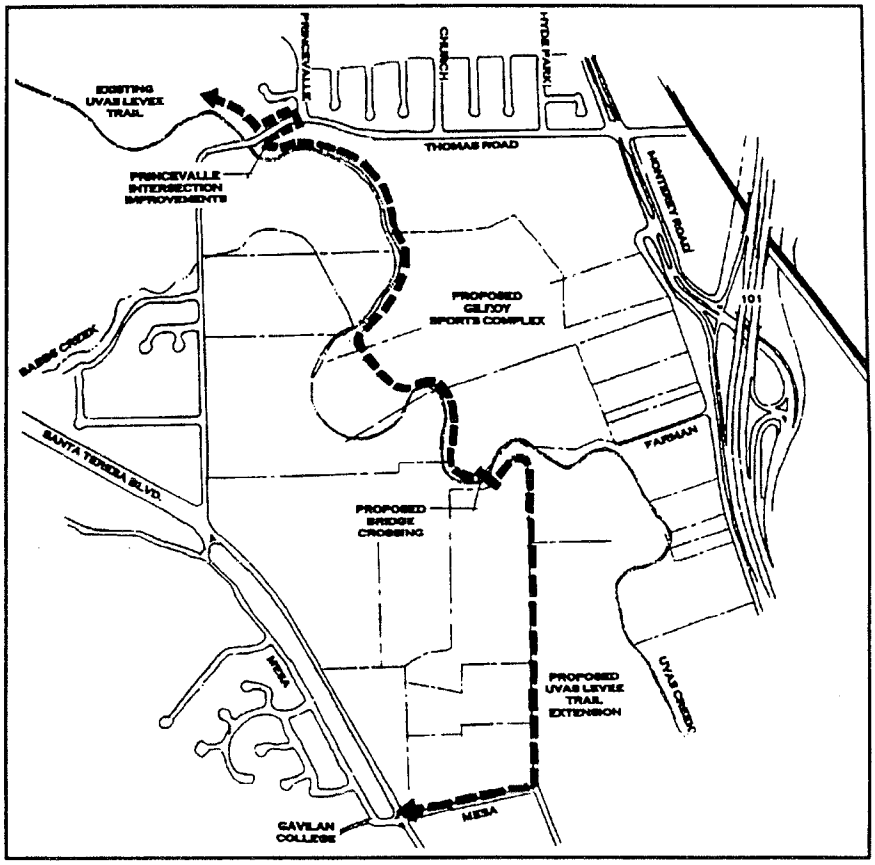


Uvas Levee Trail System Extension to Thomas Road Bridge



Uvas Levee Trail System Extension to Gavilan College

No Scale

Source: the beals group inc.

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Uvas Creek Trail Extension

Figure 9

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A segment of the Uvas Creek Trail would pass through the site. This trail would eventually provide a non-motorized transportation corridor through the southern portions of Gilroy, including connections to the sports park and Gavilan Community College.

The project site is not currently within the Urban Service Area. The portion of the project site, which would be developed as the sports park, is contiguous with the existing Urban Service Area only for a very short distance where the proposed sport park access road meets Monterey Frontage Road. The adjacent parcels to the north and east of the sports park site have been included in the Urban Service Area amendment request because the addition of the sports park parcels alone would result in a virtual "island" of Urban Service Area. The adjacent parcels' General Plan land use designation of OPEN SPACE will not be modified at this time.

1.5 Consistency With Local and Regional Plans

In accordance with CEQA Guidelines section 15125(d), this section of the EIR evaluates the consistency of the proposed project with applicable local and regional plans. These plans include the *City of Gilroy General Plan*, the *City of Gilroy Zoning Ordinance*, the *Santa Clara County General Plan*, applicable LAFCO policies, and the Bay Area Air Quality Management District (BAAQMD) *Clean Air Plan*.

City of Gilroy General Plan

The *City of Gilroy General Plan* was first adopted by the Gilroy city council on November 5, 1979. The latest revisions were adopted by the Gilroy city council on June 3, 1996. A major update to the General Plan is currently underway, and is expected to conclude in the summer of 1999. This section analyzes those policies of the current *City of Gilroy General Plan* that are relevant to the proposed project.

> ***Urban Growth and Community Design Policy 2a:*** Hazardous areas, such as flood-prone areas and earthquake fault zones, are not suitable for intensive urban development.

Consistency: The proposed project would utilize the flood-prone portions of the project site for sports fields, parkland and open space. This is not an intensive form of urban development. Therefore the proposed project is **consistent** with this policy.

> ***Urban Growth and Community Design Policy 2c:*** Extensive areas of Class I and II, agricultural land should be retained for agricultural production until the absence of alternative sites requires the conversion of agricultural land to urban uses.

Consistency: The proposed project would convert approximately 78 acres of Class I agricultural land to sports fields, parkland and open space. The sports park would be developed in phases over an approximate 20-year time span, during which undeveloped portions of the site could remain in agricultural use. The remaining parcels on the project site could remain in agricultural use at this time. Three alternative sites for the proposed project have been identified. Refer to Section 3.5, Alternatives. All of these are currently in agricultural use. All three contain prime agricultural land and would require the conversion of that land to non-agricultural uses. No suitable sites were identified that would not involve the conversion of agricultural land. The proposed project is **consistent** with this policy.

> *Urban Growth and Community Design Policy 3:* Urban development will only occur within the incorporated portion of the Planning Area. Land will therefore be annexed to the City before final development approval is given.

Consistency: The project site is outside the city limits of the City of Gilroy, but lies within its Planning Area. The sports park site would be required to be annexed to the city prior to final approval of the proposed project by the city. As part of the proposed project, the city is submitting an Urban Service Area amendment request to LAFCO to add the project site to the Urban Service Area. Approval of this amendment would also include annexation of the sports park site into the city. The other parcels are not currently proposed for development. The proposed project is **consistent** with this policy.

> *Urban Growth and Community Design Policy 4:* The City will phase development in an orderly, contiguous manner in order to maintain a compact development pattern to avoid premature investment for the extension of public facilities and services. New urban development will occur in areas where municipal services are available and capacity exists prior to the approval of development in areas which would require major new facility expansion.

Consistency: The project site is contiguous to developed areas of the city located north and east of the project site. The proposed project is **consistent** with this policy.

> *Urban Growth and Community Design Policy 5:* The City will establish a phasing plan for guiding future growth in the Planning Area. As of the date of this document, [June 3, 1996] urban development for the next five years will occur within the Urban Service Area. Urban development in the 6-20 year period will occur within the "20-year area."

> Urban zoning, development approvals and building permits will only be granted to property within the Urban Service Area. The City will not accept development proposals on land outside the Urban Service Area.
>
> Land located outside the Urban Service Area will be considered an "Urban Reserve." Agriculture will be encouraged as an interim use within the Urban Reserve.

Consistency: The project site is outside the Urban Service Area and within the 20-year area, as shown on the *City of Gilroy General Plan* land use map. As part of the proposed project, the city is submitting an Urban Service Area amendment request to LAFCO, to add the project site to the Urban Service Area. The project site would be annexed to the city. With approval of the USA Amendment, the proposed project is **consistent** with this policy.

> ***Urban Growth and Community Design Policy 9:*** New development will pay for all of the incremental public service costs which it generates.

Consistency: The proposed project is a public facility sponsored by the City of Gilroy. The city would provide the necessary services to the proposed project. Park user fees and revenue from commercial recreational facilities would cover some of the costs of operation of the facility.

> ***Urban Growth and Community Design Policy 14:*** Historic and architecturally significant buildings, archaeological sites and other landmarks that give residents a tie with the past should be preserved. Private preservation efforts will be encouraged.

Consistency: The project site is located in an area considered to be archaeologically sensitive. A mitigation measure is included in Section 2.8, Archaeological Resources, which would require monitoring of the site during construction and adherence to standard archaeological procedures in the event that archaeologically significant artifacts are discovered on the project site. With implementation of this mitigation measure, the proposed project is **consistent** with this policy.

> ***Urban Growth and Community Design Policy 26:*** The City recognizes bicycling as a major transportation mode which can significantly reduce the demand for energy needed for transportation. Bicycling will be actively encouraged as a safe, convenient, and attractive alternative to the automobile by identifying and mitigating disincentives which may exist, such as hot, un-shaded streets, dangerous traffic conditions, and physical barriers preventing safe or convenient access.

Consistency: The proposed project includes internal bicycle pathways and a connection to the Uvas Creek Trail, a major bicycle facility that would serve most of southern Gilroy. Monterey Street, south of Thomas Road–Luchessa Avenue is a city-designated bicycle route. The project plans do not indicate a bicycle route connection between the sports park entrance and Monterey Street. A mitigation measure presented in Section 2.6 Transportation/Circulation would require the inclusion of a bicycle path or bicycle lanes on or along Monterey Frontage Road. With implementation of this mitigation measure, the proposed project is **consistent** with this policy.

> *Natural Environment Policy 1:* Land will be used for the purpose for which it is most suited by virtue of its inherent natural characteristics, as modified by its locational relationships, whether that use be urban development or natural resource preservation.

Consistency: This policy requires the comparison of the relative merits of conservation of the natural attributes of the land, and the land's value for development, especially considering its location relative to other land uses and features. The project site borders Uvas Creek, which is considered a valuable natural resource to the city (refer to Natural Environment Policy 2 and 3, following). The project site is located in a flood zone, and is not appropriate for intensive development.

The current land use is agricultural. This use provides open space and a buffer to Uvas Creek. The proposed project would maintain the land as open space, and provide a minimum 50-foot setback from Uvas Creek. The proposed project is located on land that is adjacent to developed land on two sides, and easily accessed from U.S. Highway 101, most of the City of Gilroy, and the Uvas Creek Trail. The proposed project would be an appropriate use of the project site. Both agricultural use and the proposed use are appropriate to the project site. The proposed project is **consistent** with this policy.

> *Natural Environment Policy 2:* The City will preserve natural resource and wildlife habitat areas, reduce risk in hazardous areas and provide recreational opportunities by preserving the following areas in open space:
>
> - Natural resources – such as the Uvas Creek and Llagas Creek riparian communities, the heavily vegetated portions of the Santa Cruz mountains, and several stands of trees along Miller Avenue and trees bordering Hecker Pass.
>
> - Hazardous areas – such as fault zones and floodways.

- Recreational land – community, neighborhood and linear parks, expanded linear parks along Uvas and Llagas Creek, and the gold course.

Consistency: The proposed project preserves the natural resources along its frontage with Uvas Creek. The proposed project maintains a hazardous floodway in open space. The proposed project includes a link in the Uvas Creek Trail, and extends the reach of the linear park along Uvas Creek. The proposed project is **consistent** with this policy.

> *Natural Environment Policy 3:* The ecologic, aesthetic and recreational values of the creeks, which flow through the Gilroy Planning Area, will be protected from urban encroachment and degradation. New development will preserve the function of natural drainages, including small canyons and seasonal creeks. The easements and setbacks adjacent to these creeks will be maintained in open space.

Consistency: The proposed project would maintain the area near Uvas Creek as open space and enhance the natural buffer along the creek banks. There are no small drainages on the project site. The proposed project is **consistent** with this policy.

> *Natural Environment Policy 11:* The potential seismic, geologic, and flooding hazards to life and property will be reduced to an acceptable level of risk [reference to *City of Gilroy General Plan* Appendix C].

Consistency: The project site is at a moderate to high risk of flooding. Appendix C of the *City of Gilroy General Plan* lists parks and other open space uses as appropriate for areas at moderate to high risk from natural hazards. The proposed project is **consistent** with this policy.

> *Natural Environment Policy 11:* In preference to the construction of expensive flood prevention facilities, floodways will be left open for agricultural and recreational use in areas of particular risk and where protection is minimal.

Consistency: The proposed project would place recreational facilities in a flood zone. The proposed project is **consistent** with this policy.

> *Natural Environment Policy 29:* To minimize absorption losses and storm runoff increases, the City will encourage removal of pavement not directly needed for traffic or parking needs, maintenance of

unpaved parkways between sidewalks and streets, use of permeable paving, and a break-up of large paved areas with landscaped strips and islands.

Consistency: The proposed project includes paved access roads, parking areas and pathways. Mitigation measures presented in Section 2.3 Hydrology require the preparation of a hydrology report and drainage plans. With implementation of these mitigation measures the proposed project is **consistent** with this policy.

Natural Environment Policy 41: Areas subject to natural hazards such as major flooding or soils with a high water table will be encouraged to remain in long-term agricultural production where such use exists.

Consistency: The intent of this policy is to protect people and structures from potential injury or damage as the result of flooding. The proposed project would convert land in agricultural use within a flood zone to sports fields and parkland. While these are urban uses, they are appropriate uses of a flood zone and do not impose any undue risks from flooding. The proposed project is **consistent** with this policy.

Public Services and Facilities Policy 2: The City will provide a full range of necessary public facilities and services that are convenient to users, economical, and that reinforce City and community identity.

Consistency: The proposed project would fulfill a need for a large multi-use sports facility for City of Gilroy residents. The proposed project is **consistent** with this policy.

Public Services and Facilities Policy 5: Parks and recreation facilities of varying sizes, function and location will be provided to serve Gilroy's entire population.

Consistency: The proposed project would provide a large sports facility currently not available to Gilroy residents. The southern part of Gilroy has very few park facilities; the proposed sports park would be the southern-most park facility in Gilroy. The proposed project is **consistent** with this policy.

Public Services and Facilities Policy 15: The City should attempt to acquire the rights to use public and quasi-public utility and drainage channel corridors as linear parks to provide the network for a system of pedestrian and bicycle paths. Whenever feasible, recreational open spaces and linear parks should be linked to each other and to those planned by the Santa Clara County Parks and Recreation Department.

> Where interruption of the open space network is unavoidable, connecting foot and bicycle paths should be marked and made as safe as possible.

Consistency: The proposed project would be linked to other areas of the city by the Uvas Creek Trail and would include extensions of the Uvas Creek Trail. The Uvas Creek Trail currently traverses Uvas Creek Park Preserve and has a close connection to Christmas Hill Park. The proposed project would link the trail with the proposed sports park and facilities at Gavilan Community College. The proposed project is **consistent** with this policy.

> *Public Services and Facilities Policy 36:* Proposed expressway, arterial collector street and bicycle path alignments will be planned and reserved in advance of development in areas in which increased traffic will be generated. Development will be set back along the entire right-of-way (ROW) with sufficient width to accommodate anticipated future traffic requirements.

Consistency: The proposed project includes plans for the ultimate extension of the Uvas Creek Trail south from the project site to Gavilan Community College. The proposed project is **consistent** with this policy.

> *Public Services and Facilities Policy 46:* The City will correct deficiencies and expand the existing facilities and provide for the design of safe, convenient and attractive bicycle and pedestrian facilities whenever possible.

Consistency: The proposed project would extend the existing Uvas Creek Trail south to the proposed sports park and Gavilan Community College. The proposed project is **consistent** with this policy.

> *Public Services and Facilities Policy 47:* Proposed expressway, arterial and collector streets on the City's Bikeway Plan will be planned to accommodate bike traffic by appropriate bikeway improvements, including bike paths separated from the roadway whenever possible. Bicycle and pedestrian paths will be provided along greenbelts, linear parks, public easements and drainages in public open space.

Consistency: The proposed project would extend the existing Uvas Creek Trail south to the proposed sports park and Gavilan Community College. The proposed project is **consistent** with this policy.

> *Public Services and Facilities Policy 48:* Street crossings shall be designed to provide for the safety needs of bicyclists and pedestrians. River and other crossings by bridges shall be designed to accommodate bike lanes or paths physically separated from the roadway. Bridges for the exclusive use of pedestrians and bicycles should be provided whenever barriers exist which impede convenient and safe access.

Consistency: The proposed project would include a bicycle and pedestrian bridge over Uvas Creek in order to continue the Uvas Creek Trail to Gavilan Community College. The Uvas Creek Trail would temporarily utilize an at-grade crossing of Thomas Road–Luchessa Avenue. Site distances at the proposed crossing are good. Crossing of Thomas Road–Luchessa Avenue might be attempted west of the intended crossing due to the proposed design of the path. A mitigation measure presented in Section 2.6 Transportation/Circulation would require a revised design of the path near Thomas Road–Luchessa Avenue. With implementation of this mitigation measure the proposed project is **consistent** with this policy.

> *Public Services and Facilities Policy 55:* Emphasize non-auto travel modes of transportation.

Consistency: The proposed project includes access features exclusively for bicycle and pedestrian use. The entry roads and parking lots are designed to accommodate busses. The proposed project is **consistent** with this policy.

> *Circulation and Air Quality Supporting Policy 9:* The City will strive to maintain traffic conditions at Level of Service (LOS) C (corresponding to no more than 80 percent of theoretical capacity utilization) at Gilroy intersections and roadways. Exceptions to this standard will be allowed only where the City Council determines that improvements needed to maintain LOS C at specific locations are infeasible.

Consistency: At full build-out, the proposed project would cause the level of service at the intersection of Monterey Street and Monterey Frontage Road to drop below LOS C. A mitigation measure presented in Section 2.6 Transportation/Circulation would require the signalization of this intersection to return operation of the intersection to LOS C or better. With implementation of this mitigation measure, the proposed project is **consistent** with this policy.

City of Gilroy General Plan Update

The City of Gilroy is currently updating its General Plan. The updated General Plan is expected to be available for review in the summer of 1999. Since the update is in process and no final determinations have been made, no analysis of its provisions is included in this EIR.

City of Gilroy Zoning Ordinance

The *City of Gilroy Zoning Ordinance* was adopted by the Gilroy City Council on August 15, 1983. This analysis was prepared based on amendments adopted by the Gilroy City Council through February 2, 1998.

The proposed project would consist of the sports park, which would be zoned "PF Park/Public Facilities," and the remaining land, which would be zoned "OS Open Space". The following discussion analyzes those provisions of the zoning code that are especially relevant to the proposed project.

Section 24 OS Open Space District: The Open Space district permits agricultural uses, botanical conservatories, outdoor nature laboratories, native wildlife sanctuaries and similar uses. Conditional uses in this district include communication and public utility facilities; educational, charitable, research and philanthropic institutions in conjunction with permitted uses; guest ranches; recreational uses, such as riding academies, stables, country clubs and golf courses; and similar uses as determined by the planning director.

The maximum building height allowed in the district is two stories or 30 feet. Land designated as Open Space may have to remain in that designation for a minimum period of time, to be determined by the city council at the time of approval of the designation. Roads and trails built in the Open Space district require the approval of the planning director.

Consistency: There are currently no development plans for the parcels that would be designated Open Space. The Uvas Creek Trail extension would require approval from the planning director on those parcels that are designated Open Space. The proposed project is **consistent** with the provisions of this section of the zoning ordinance.

Section 25 PF Park/Public Facilities District: The Park/Public Facilities district permits all facilities owned or leased, and operated or used by any government agency; public or private colleges and universities and their related facilities; hospitals; and cemeteries, mausoleums, or crematories. Conditional uses include the facilities of entities under the jurisdiction of the Federal Communications Commission or the Interstate Commerce Commission; and, on property owned by a governmental agency and leased for any of these uses: private educational facilities, day-care centers, community centers, residential care facilities, business or trade schools, outdoor recreation service, neighborhood recreation center, art dance gymnastic, exercise or music studio or class, or special education class.

The maximum allowable building height in the district is 30 feet.

Consistency: The proposed project would include three parcels designated Park/Public Facility, on which the proposed sports park would be built. The sports park would be owned and operated by the City of Gilroy, with some facilities

potentially operated by other entities under lease agreements with the city. The proposed project is **consistent** with the provisions of this section of the zoning ordinance.

Santa Clara County General Plan

The project site is currently under the jurisdiction of Santa Clara County. The *Santa Clara County General Plan* was adopted by the Santa Clara County Board of Supervisors on December 20, 1994. The General Plan land use designation for the project site is Open Space Reserve (OSR). The following *Santa Clara County General Plan* policies apply to lands designated OSR.

> ***Land Use Policy R-LU 45:*** Open Space Reserve (OSR) lands include rural unincorporated areas contiguous to a city Urban Service Area (USA) for which no permanent land use designation was applied pending future joint studies by affected jurisdictions of desired long-term land use patterns.

Consistency: This policy defines the county's current land use designation for the project site. The long-term land use for the project site has not been determined by the county.

The City of Gilroy, County of Santa Clara and Santa Clara County LAFCO participated in a study of agricultural lands near Gilroy that resulted in the designation of the Gilroy Agricultural Lands Area. The project site is outside of those areas considered for inclusion in the study area. The purpose of the Gilroy Agricultural Lands Area is to protect the economic viability of agriculture and to direct urban growth in a sustainable pattern elsewhere in the vicinity of Gilroy. The project site is outside the Gilroy Agricultural Lands Area boundaries.

The project site is designated as OPEN SPACE and PARK/PUBLIC FACILITY in the General Plan. The sports park site would be developed consistent with this designation and the remaining parcels would retain their OPEN SPACE designation. The proposed project is **consistent** with this policy.

> ***Land Use Policy R-LU 49:*** For lands within the vicinity of the City of Gilroy designated OSR, joint studies should be conducted to resolve and define:
>
> a. areas to be reserved for future urban growth;
>
> b. areas to be reserved for long-term agricultural use; and
>
> c. other planning objectives identified within the South County Joint Area Plan deemed appropriate to the OSR areas.

Consistency: The *Study of the South County Agricultural Preserve* was a joint effort of Santa Clara County, the City of Gilroy and Santa Clara County LAFCO. The study established the Gilroy Agricultural Lands Area, an area of approximately 15,800 acres of agricultural land to the east and south of Gilroy that will not be developed in the near future. The proposed project is located outside of the Gilroy Agricultural Lands Area on land that is within the City of Gilroy's 20-year area. The 20-year area is designated on the City of Gilroy General Plan as land that is expected to be developed over the next 20 years. The proposed project is **consistent** with this policy.

The following policies from the *Santa Clara County General Plan* concern urban growth and expansion of Urban Service Areas.

> *Growth and Development Policy C-GD 1:* Most of the future urban growth of Santa Clara County should be accommodated within the existing urban areas, through infill development, rather than expansion of the urbanized area into hillsides and resource areas.

Consistency: The proposed project would expand growth into an area that contains prime farmland, a valuable resource. However, the land is contiguous with developed portions of the City of Gilroy, and is adjacent on two sides to developed land. The proposed project is **consistent** with this policy.

> *Growth and Development Policy C-GD 2:* Urban development shall occur only within cities' urban service areas (USAs) and under city jurisdiction. The County shall not allow urban development on unincorporated lands outside cities' urban service areas.

Consistency: Part of the proposed project includes the addition of the project site to the City of Gilroy Urban Service Area, as well as annexation of the land by the city. The proposed project is **consistent** with this policy.

> *Growth and Development Policy C-GD 3:* Urban service areas should generally include only those areas suited for urban development. Development of such areas should be:
>
> a. reasonably serviceable with public facilities and services;
>
> b. relatively free from risks associate with natural hazards;
>
> c. without substantial adverse environmental impact;
>
> d. not likely to create severe off-site impacts on surrounding areas; and
>
> e. without cumulative adverse impacts on the county's water supply watersheds or any other natural resources.

Consistency: Each of these factors is considered below:

a. The proposed project is located close to existing public services.

b. The project site is located within a flood zone. However, the proposed sports park use would not result in the exposure of life or property to the risks associated with flooding and is an appropriate use of such a site.

c. The proposed project would convert prime farmland to non-agricultural uses over a projected development period of 20 years. This is considered a significant unavoidable impact. No alternative site was identified that would not result in the conversion of prime agricultural land. The project site is located outside of the Gilroy Agricultural Lands Area and within the city's 20-year growth area.

d. The proposed project would not create severe off-site impacts on surrounding areas. Because the project site is close to major transportation corridors traffic to and from the proposed project will not have a significant impact on local streets, nor will it have a significant impact on traffic on U.S. Highway 101. Mitigation measures presented in the EIR would mitigate other potential off-site impacts to a less than significant level. The proposed project would have beneficial impacts on the adjacent riparian areas by widening the existing buffer area.

e. The proposed project would not result in cumulative adverse impacts on the county's water supply watersheds or other natural resources.

The proposed project is **consistent** with this policy, with the exception of item c. The proposed project would have unavoidable significant impacts in regard to the loss of prime agricultural land.

> *Growth and Development Policy C-GD 5:* Lands generally unsuitable for urban development may be allowed to annex to cities or be included in urban service areas only if the land is preserved as a non-urban open space use.

Consistency: The project site is located in a flood zone as shown on the National Flood Insurance Program maps. Most of the project site is located in Zone B in which urban development is permitted with appropriate design considerations. The portion of the project site that is susceptible to more severe flooding is proposed for use as athletic fields and parkland. The proposed project is **consistent** with this policy.

> *Growth and Development Policy C-GD 6:* Hazard and resource areas with the following characteristics shall be considered unsuited for urban development:

a. flood potential, including areas designated as floodways, tidal zones, coastal high hazard areas and federal flood insurance rate zones by the National Flood Insurance Program.

Consistency: The project site is located in a flood zone as shown on the National Flood Insurance Program maps. Much of the project site is located in Zone X in which urban development is permitted with appropriate design considerations. The portions of the project site that are susceptible to more severe flooding are proposed for use as athletic fields, parkland and open space. The proposed project is **consistent** with this policy.

Growth and Development Policy C-GD 6: Hazard and resource areas with the following characteristics shall be considered unsuited for urban development:

e. prime agricultural soils.

Consistency: The proposed project would convert prime farmland to non-agricultural uses over a projected development period of 20 years. No alternative site was identified that would not result in the conversion of prime agricultural land. The proposed project is **consistent** with this policy.

Growth and Development Policy C-GD 7: Urban expansion should be planned on a staged, orderly basis, consistent with applicable plans (e.g. city, County, countywide plans) and the availability of needed urban services and facilities. The discouragement of expansion of cities' Urban Service Areas should be recommended to the LAFCO.

Consistency: The project site is currently within the City of Gilroy planning area and is within the city's 20-year development boundary. The proposed sports park is expected to be built in a staged and orderly basis in phases over a 20-year period. The proposed project is **consistent** with this policy.

Growth and Development Policy C-GD 8: Proposals to annex land or expand a city's urban service area boundaries shall be approved only if:

a. the city, special districts and affected school districts have the ability to provide all needed public services and facilities to the area within five years and without lessening existing levels of service;

b. the existing supply of land within the city's USA accommodates no more than five years of planned growth;

c. the area proposed for urban development is contiguous to existing urban areas.

Consistency: Each of these factors is considered below:

a. The City of Gilroy will provide all services to the project site as needed. The city has adequate potable water and will extend a recycled water line to the site for irrigation. The city has adequate wastewater treatment capacity to accommodate the proposed project. The proposed project would be served by the city police and fire departments without the need for new facilities or personnel. The proposed project would not result in additional students and so there would be no impact on school districts.

b. Land within Gilroy's Urban Service Area is expected to be substantially developed within five years. Most of the land remaining within the Urban Service Area is designated for residential and commercial use. Suitable sites for the sports park use are very limited. Two of the studied alternate locations are located within the Urban Service Area, and one alternate location is partially within the Urban Service Area.

c. The project site is contiguous with urban development on the north and east. The alternate sites are less contiguous with other urban development than the project site.

Land within Gilroy's existing Urban Service Area is expected to be substantially built within five years. The proposed project requires a large amount of land. Though three alternative sites were found within (or partially within) the existing Urban Service Area, these were considered to be less suitable than the project site. Because the project site is located in a flood zone, the City was able to purchase the land at cost that makes the proposed project feasible. The alternative sites are not located in a flood zone and do not have the economic advantage that the project site has. The alternative sites were not as contiguous to developed land as the project site and two of the alternative sites were likely to have significant traffic impacts. Refer to Section 3.5 Alternatives.

The proposed project is **generally consistent** with this policy.

> *Growth and Development Policy C-GD 9*: Proposals to annex land or expand the USA of a city for the purpose of adding lands for employment should be approved only if:
>
> a. lands planned for employment overall do not exceed the capacity of the city's planned housing supply; or
>
> b. the city's housing element of its General Plan can document that the housing needs of all segments of the community population are being met as stipulated by state law.

Consistency: The proposed project includes the development of a sports park, which is not an employment-based use. The remaining parcels on the project site are not proposed for development at this time and it is not known what type of development will ultimately take place on those parcels. The proposed project is **consistent** with this policy.

Santa Clara County Local Agency Formation Commission Policies

The local agency formation commissions were created by the Knox-Nisbet Act passed by the State legislature in 1963 to govern changes in the boundaries and organization of cities and special districts in California. This act was supplemented by the District Reorganization Act of 1965 and the Municipal Organization Act of 1977. These three laws were consolidated under the Cortese-Knox Local Government Reorganization Act of 1985 (Government Code section 56000 et seq.).

> ***Urban Service Area Amendment Policy 1:*** LAFCO will review/amend a city's Urban Service Area once a year, if such review is desired by the city and initiated by city resolution and application. Until a city's application has been heard and acted upon by the Commission, no further Urban Service Area amendments will be accepted for filing from that city. LAFCO may make an exception to the "once a year" limitation upon Urban Service amendment requests where amendment is needed to carry out some special institutional development or activity that is in the public interest. Such exception shall not normally be extended in connection with proposed residential, commercial, or industrial development.

Consistency: This amendment request is expected to be made in August 1999. The previous amendment request was filed in October 1997. The proposed project is **consistent** with this policy.

> ***Urban Service Area Amendment Policy 2:*** LAFCO will require application of an appropriate General Plan designation to territory proposed for inclusion in an Urban Service Area.

Consistency: The parcels comprising the sports park would be designated PARK/PUBLIC FACILITY, which is consistent with their proposed use. The remaining parcels would retain the current OPEN SPACE designation, consistent with the current land use on those parcels. The proposed project is **consistent** with this policy.

Urban Service Area Amendment Policy 3: LAFCO encourages contractual agreements and/or plans between the cities and the County which define:

a. Growth at the urban fringe; and

b. Potential, new growth areas.

Consistency: The *Study of the South County Agricultural Preserve* was a joint effort of Santa Clara County, the City of Gilroy and Santa Clara County LAFCO. The study established an area of approximately 15,800 acres to the east and south of Gilroy as the Gilroy Agricultural Lands Area. The proposed project is located outside of the agricultural lands area on land that is within the City of Gilroy's 20-year growth area. The proposed project is **consistent** with this policy.

Urban Service Area Amendment Policy 4: LAFCO will consider factors such as the following to determine the local and regional impacts of a proposed Urban Service Area amendment:

a. The ratio of lands planned for residential use to land planned for employment-producing use;

b. The existence of adequate regional and local transportation capabilities to support the planned city growth;

c. Ability of the city to provide urban services to the growth areas without detracting from current service levels;

d. The ability of school districts to provide school facilities;

e. Whether the conversion of agricultural and other open space lands is premature, or if there are other areas into which to channel growth;

f. The role of special districts in providing services;

g. Environmental considerations which may apply;

h. The impacts of proposed city expansion upon the County as a provider of services;

i. Fiscal impacts on other agencies.

Consistency: Each of these factors is discussed below:

a. There are three existing houses that would remain, at least in the short term, on the project site. A residence would be provided for a caretaker for the sports park. An unknown number of employees would work at the project site, but it would be a fairly small number. Many of the jobs at the project site would be low-paid seasonal jobs.

b. The proposed project is served by U.S. Highway 101, Monterey Street and other local streets, and the extension of the Uvas Creek Trail, which is proposed as a part of this project.

c. The City of Gilroy would extend domestic and recycled water supply lines and sewer and storm drain lines to the project site. The City of Gilroy police and fire departments would provide public safety services to the project site. This extension of services would not reduce the level of service available to other areas of the city.

d. The proposed project will not affect school enrollment. This factor is not relevant to the proposed project.

e. The proposed project would result in the conversion from agricultural use of the proposed 78.4-acre sports park site. The remaining parcels would remain in agriculture at this time. The alternate sites are currently in agricultural use and they would be removed from agricultural use if they were developed for a sports park.

f. The City of Gilroy would provide water, sewer, storm drainage, police and fire services to the site.

g. The amendment is subject to the analysis of this EIR. The proposed project would result in the conversion of prime agricultural land to non-agricultural uses. This would be a significant and unavoidable impact. Other potential impacts have been identified in this EIR and mitigation measures are presented to reduce those impacts to a less than significant level.

h. The proposed project would not increase the demand on services provided by Santa Clara County. Services currently provided by the county would be provided by the City of Gilroy if the proposed project is approved.

i. A fiscal analysis is currently under preparation for the proposed project.

The proposed project is **consistent** with this policy.

> ***Urban Service Area Amendment Policy 5:*** When a city with a substantial supply of vacant land within its Urban Service Area applies for an Urban Service Area expansion, LAFCO will require an explanation of why the expansion is necessary, and how an orderly, efficient growth pattern, consistent with LAFCO mandates, will be maintained.

Consistency: The city has evaluated all available vacant land in the city. Land within Gilroy's existing Urban Service Area is expected to be substantially built

within five years. One location that is within the city limits has been considered as an alternative. An additional alternative location that is within the Urban Service Area and one that is partially within the Urban Service Area were also considered.

Though several alternative sites were found within the existing Urban Service Area, these were considered to be less suitable than the project site. Because the project site is located in a flood zone, the City was able to purchase the land at cost that makes the proposed project feasible. The alternative sites are not located in a flood zone and do not have the economic advantage that the project site has. The alternative sites were not as contiguous to developed land as the project site and two of the alternative sites were likely to have significant traffic impacts. Refer to Section 3.5 Alternatives.

The city prefers the project site due to its proximity to U.S. Highway 101 and the Uvas Creek Trail, and because the land is within a flood zone and therefore more affordable. The project site is adjacent to developed land on two sides.

The proposed project is **generally consistent** with this policy.

> ***Urban Service Area Amendment Policy 6:*** The Commission will discourage Urban Service Area expansions which include agricultural or other open space land unless the city has accomplished one of the following:
>
> a. Demonstrated to LAFCO that effective measures have been adopted for protecting the open space status of the land. Such measures may include, but not be limited to, establishment of agricultural preserves pursuant to the California Land Conservation Act; adoption of City/County use agreements or applicable specific plans; implementation of clustering or transfer-of-development-rights policies; evidence of public acquisition; or
>
> b. Demonstrated to LAFCO that conversion of such lands to other than open space uses is necessary to promote the planned, orderly, efficient development of the city.

Consistency: The sports-park land has been acquired by the City of Gilroy for public open space use. The existing open space designation of the remaining parcels would not change at this time. When those parcels are developed, development would be orderly, and compatible with surrounding urban uses.

The *Study of the South County Agricultural Preserve* was a joint effort of Santa Clara County, the City of Gilroy and Santa Clara County LAFCO. The study established an area of approximately 15,800 acres to the east and south of Gilroy as an agricultural preserve. The proposed project is located outside of the agricultural preserve on land that is within the City of Gilroy's 20-year growth area. The proposed project is **consistent** with this policy.

Urban Service Area Amendment Policy 7: The Commission will consider whether an Urban Service Area amendment, leading to the conversion of agricultural or other open space land, will adversely affect the open space resources of the County. Factors to be studied include, but are not limited to:

a. The agricultural significance of the amendment area relative to other agricultural lands in the region (soil, climate, water-related problems, parcel size, current land use, crop value, Williamson Act contracts, etc.);

b. The economic viability of use of the land for agriculture;

c. Whether public facilities, such as roads, would be extended through or adjacent to other agricultural lands in order to provide services to anticipated development in the amendment area;

d. Whether the amendment area is adjacent to or surrounded by existing urban or residential development.

Consistency: The proposed project's consistency with this policy is analyzed separately for each factor:

a. The project site is adjacent to the urbanized area of Gilroy and included within the city's 20-year growth area. The Gilroy Agricultural Lands Area has been established on 15,800 acres east and south of the city to maintain the agricultural viability of that area. Four of the parcels on the project site were previously under Williamson Act contracts, but those have expired. The project site land is classified as Prime Farmland. The sports park site was most recently planted in corn. Based on the 1997 Santa Clara County crops report, agricultural production on the sports park site is estimated to have been worth $174,000. The sports park site represents a relatively small part of the County's agriculture.

b. The project site is surrounded by urban development on the north and east sides. Land which is largely surrounded by urban land is generally less viable economically for agricultural use compared to lands which are in wholly agricultural areas (Crawford, Multari and Starr 1995).

c. No new roads or other infrastructure would be built through other agricultural lands to serve the proposed project. Farman Lane, a dirt farm road would be paved.

d. The project site is adjacent to developed areas on its north and east sides. This would be considered a favorable factor towards approval of the Urban Service Area amendment.

The project site is adjacent to urbanized land on two sides and is within the city's 20-year urban growth boundary. Although the proposed project would convert prime farmland to other uses, because of the project site's proximity to urban development, its relatively small contribution to agricultural production and its proposed park use, the proposed project would not have an adverse effect on the County's open space resources. The proposed project is **generally consistent** with this policy.

> *Urban Service Area Amendment Policy 7:* Where appropriate, LAFCO will consider adopted policies advocating maintenance of greenbelts or other open space around cities in reviewing Urban Service Area amendments.

Consistency: The *Study of the South County Agricultural Preserve* was a joint effort of Santa Clara County, the City of Gilroy and Santa Clara County LAFCO. The study established an area of approximately 15,800 acres to the east and south of Gilroy as an agricultural preserve. The proposed project is located outside of the agricultural preserve on land that is within the City of Gilroy's 20-year growth area. The proposed project is **consistent** with this policy.

Bay Area Air Quality Management District 1997 Clean Air Plan

The 1997 Clean Air Plan was adopted by the BAAQMD on December 17, 1997. The plan is an update to the 1991 and 1994 Clean Air Plans, enacted pursuant to the California Clean Air Act of 1988, as amended. The Clean Air Act requires air districts that exceed State ozone standards to reduce pollutant emissions by five percent per year, or take all feasible measures to achieve emissions reductions.

The principal strategies for ozone reduction that are relevant to the proposed project are the reduction of automobile trips and traffic congestion, the provision of transit and encouragement of bicycle and pedestrian travel.

Consistency: The proposed project would be accessible by automobile from U.S. Highway 101 and major local streets, by public bus service planned to serve the entry gate area of the project, and by non motorized means through the entry gate and through the Uvas Creek Trail. URBEMIS7 modeling was performed by EMC Planning Group Inc. in December 1998. Project-associated automobile emissions were projected to be within thresholds established by the BAAQMD. The proposed project is **consistent** with this plan.

1.6 EIR Uses

As mandated by CEQA Guidelines section 15124(d), this section contains a list of agencies that are expected to use the EIR in their decision-making, and a list of the approvals for which the EIR will be used. These lists include information that is known to the lead agency.

List of Agencies and Approvals

Lead Agency

City of Gilroy

- Urban Service Area Amendment (Entire Project Site)
- Annexation (Entire Project Site)
- Pre-zoning (Sports Park Site Only)
- Sports Park Master Plan
- Construction (Sports Park Site Only)

Regional Agencies

Santa Clara County Local Agency Formation Commission

- Urban Service Area Amendment (Entire Project Site)

Santa Clara Valley Water District

- Development Permit for construction within 50 feet of a waterway.

State Agencies

California State Department of Water Resources

- General Development Storm Water Discharge Permit

California Department of Fish and Game

- California Department of Fish and Game Code Section 1603 Stream or Lake Alteration Agreement (Creek Crossing of Uvas Creek Trail Extension)

Federal Agencies

U.S. Army Corps of Engineers

- Clean Water Act Section 404 Permit (Creek Crossing of Uvas Creek Trail Extension)

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2.0 Environmental Setting, Impacts and Mitigation Measures

The proposed project is comprised of an Urban Service Area amendment, annexation, sports park master plan and development and related off-site improvements. Where the setting or impacts are similar for all facets of the proposed project, these are discussed as a whole. Where the setting or impacts are specific to particular aspects of the proposed project, these are discussed individually.

Environmental impacts are categorized into five levels of impacts: beneficial; no impact; less than significant; significant (or potentially significant) and significant and unavoidable.

2.1 Agricultural Considerations

Environmental Setting

Existing Uses

The project site comprises 14 parcels with a total land area of 133.2 acres. The majority of the acreage is currently farmed with row crops. Four rural residences and associated farm buildings are located on the project site, near Monterey Street and Monterey Frontage Road. A commercial propane gas facility is located within the project site near the corner of Monterey Street and Thomas Road–Luchessa Avenue. Along the western periphery of project site the proposed Urban Service Area amendment boundaries encompass small portions of Uvas Creek. These areas are undeveloped and support riparian vegetation. A levee extends along the eastern bank of Uvas Creek for approximately 1,800 feet to a point approximately 1,100 feet south of Thomas Road. Much of the project site is located in a flood zone, and is not appropriate for intensive development. The sports park site is entirely in agriculture.

Approximately 4,000 feet of the proposed Uvas Creek Trail extension is within the project site, primarily on the levee or existing farm roads. The remainder of the proposed trail extension is to the south of Uvas Creek, off the project site on what is currently a dirt access road to surrounding farmland.

Surrounding Uses

The land north of the project site is an established residential neighborhood of single family houses. To the east of the project site are commercial uses, including hotels

under construction, automobile dealership and mini-storage. South of the project site is additional agricultural land bordered by Uvas Creek on its west and south, and Monterey Frontage Road on its east. Greenhouses occupy some of this agricultural land and the remainder is farmed with row crops. On the west, the project site borders Uvas Creek, which is designated by the city for open space and preservation of natural resources (City of Gilroy 1996).

Two park and open space areas are located along Uvas Creek northwest of the project site. Uvas Creek Preserve surrounds the creek for approximately two miles. A bicycle trail runs most of the length of the preserve. Christmas Hill Park is located on uplands to the southwest of Uvas Creek, adjacent to the Uvas Creek Preserve. Christmas Hill Park is a developed park with softball field and an amphitheater, among other facilities. It is the site of the annual Gilroy Garlic Festival. Gilroy High School athletic fields provide additional open space to the north of Uvas Creek. Most of the land near Uvas Creek to the south of the project site is farmland. Existing uses on the project site and surrounding land are illustrated in Figure 4 in Section 1.3 Project Description.

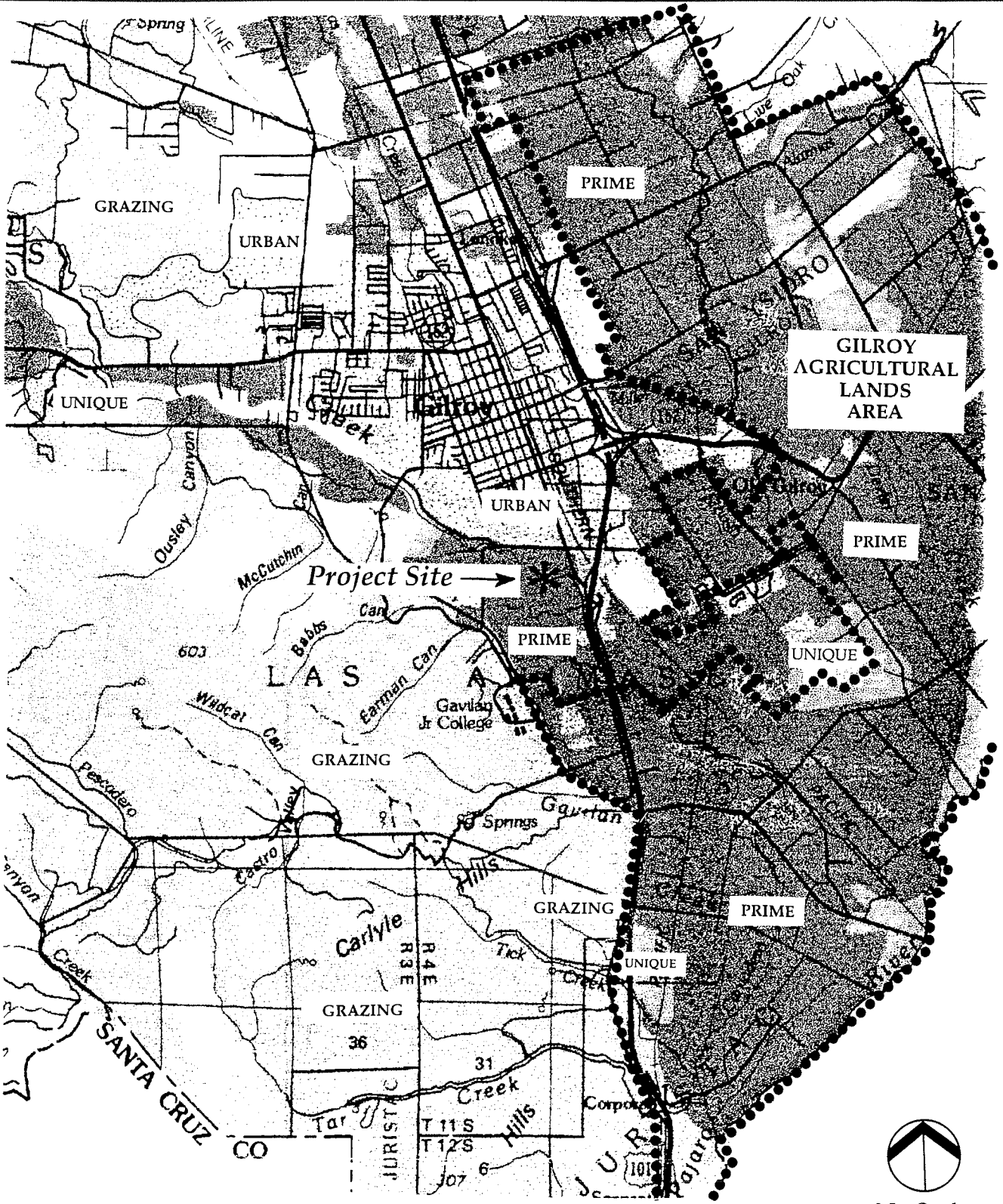
Soils and Farmland Value

The soil on the project site is Yolo loam. Yolo loam is a well-drained soil underlain by alluvium from sedimentary rock. The soil has high fertility and a very deep effective rooting depth. The soil is categorized as Agricultural Class I and is considered to be the most productive soil in the Santa Clara Valley (United States Department of Agriculture Soil Conservation Service 1974). Class I soils are those that have few limitations that restrict their use.

Approximately 4,140 acres or 0.8 percent of Santa Clara County soils are Yolo loam. In 1974, approximately half of all areas of Yolo loam soil had been used for urban development.

The California Department of Conservation maintains the Farmland Mapping and Monitoring Program. This program qualitatively identifies and keeps an inventory of California farmland. Under this program the project site is classified as prime farmland (California Department of Conservation 1996). Figure 10 shows the Farmland Mapping designations in the project vicinity. Prime farmland is defined by the California Department of Conservation as:

> ...land which has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained yields of crops when treated and managed, including water management, according to current farming methods. *Prime Farmland* must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date. *Prime Farmland* does not include publicly owned lands for which there is an adopted policy preventing agricultural use.



Source: California Department of Conservation and EMC Planning Group Inc.

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy Sports Park and USA Amendment EIR

Farmland Designations

Figure 10

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In 1996, Santa Clara County had 33,870 acres of prime farmland. Between 1994 and 1996, 304 acres of prime farmland were converted to other uses in Santa Clara County (California Department of Conservation 1996). Between 1990 and 1994 there were 1,613 acres of prime farmland in Santa Clara County converted to other uses (Santa Clara County 1994). Land taken out of agricultural use for urban development is permanently lost from agricultural production. Urban development leads to lowered efficiency and decreased production on remaining farmland (Crawford, Multari and Star 1995).

Williamson Act Lands

The goal of the California Land Conservation Act of 1965, or Williamson Act, is to retain agricultural land in agricultural use. The act enables local governments to enter into contracts with private landowners to restrict land uses in return for reduced property tax assessments. The program is overseen by the California Department of Conservation. Williamson Act contracts are for ten-year terms, with automatic renewal each year. A contract may be terminated in several ways. Most commonly, a notice of non-renewal is filed, and the contract ends when the remaining nine years have expired. The tax assessment reductions are gradually phased out over the nine-year period. A contract may be cancelled without the nine-year termination period, but this procedure requires the review and approval of the Department of Conservation and the payment of a cancellation fee equal to 12 percent of the full market value of the property.

Four of the parcels on the project site (APNs 808-21-028, 808-21-029, 808-21-030 and 808-21-031) were previously under Williamson Act contract. These parcels include two of the three parcels that comprise the sports park site and the two parcels between the sports park site and Monterey Frontage Road. Notices of non-renewal were filed for all four parcels and the contracts expired effective January 1, 1999 (Robert Friedrick, personal communication, February 4, 1999).

Gilroy Agricultural Lands Area

The Gilroy Agricultural Lands Area was established through an agreement between the City of Gilroy, Santa Clara County, and Santa Clara County LAFCO, based on the outcome of the *Study of the South County Agricultural Preserve*. The 15,660-acre area is designated for long-term agricultural use and aims to prevent the encroachment of urban development. The area covers agricultural land east and south of Gilroy, from Buena Vista Road in the north to the Pajaro River and San Benito County line in the south. All but a very small part of the agricultural lands area is located to the east of U.S. Highway 101.

The agricultural lands agreement is meant to support long-term agricultural economic viability and to encourage sustainable future urban development (City of Gilroy et al 1996). The plan directs future growth to areas within a 20-year growth boundary that is consistent with County and City General Plans and remains

relatively constant over the long term. Prime farmland is a severely limited and irreplaceable resource. The establishment of the Gilroy Agricultural Lands Area is a partial mitigation for the loss of prime agricultural land in the vicinity of Gilroy.

Project Analysis

The proposed project would add 133.2 acres of prime farmland to the Urban Service Area of the City of Gilroy. The Urban Service Area consists of land that is expected to be developed for urban uses within a five-year timeframe. The sports park is the only development proposed at the present time. The remaining parcels would retain a land use designation of OPEN SPACE at this time. According to the *City of Gilroy General Plan Map* the project site is within the City of Gilroy 20-year area boundary. The 20-year area is an area that is expected to accommodate development within an approximate 20-year timeframe. The proposed project is consistent with the policy of the Gilroy Agricultural Lands Area, which directs new development out of the agricultural lands area and into the 20-year area. Several of the parcels were under Williamson Act contract, but those contracts have now expired.

The land proposed for the sports park and trail extension would be remain as open space, and provide a buffer between developed areas and the natural corridor along Uvas Creek. The sports park would be the third in a series of parks that preserve an open space corridor along Uvas Creek. Substantial and contiguous open space adjacent to the creek is beneficial in maintaining the viability of the riparian habitat for wildlife. The sports park would also form a buffer between the residential uses north of the project site, and the existing agricultural uses south of the project site. Much of the sports park site is within the flood zone of Uvas Creek, and uses such as athletic fields are appropriate there, since the potential for flood-related harm to users or structures would be very low.

The sports park site would be directly accessed by bicycle trail, which is especially appropriate for a facility that will be used extensively by children. The proposed trail would be an extension of the existing Uvas Creek Trail. Most of the proposed trail extension would be built on existing dirt roads, either on the levee top or adjacent to farmland. One small part of the trail would be built directly on land currently in crops. The trail would be located along the edge of the Uvas Creek natural area. Trails are acceptable uses within and adjacent to habitat protection buffers.

The trail extension would create a continuous non-motorized route through southwest Gilroy, connecting two neighborhoods, Gilroy High School, Gavilan Community College, and the sports park. The trail would also connect to Princevalle Street, a designated Class II bicycle route that provides a direct link to central Gilroy.

The proposed project is located on land that is adjacent to developed land on the north and east and easily accessed from U.S. Highway 101, most of the City of

Gilroy, and the Uvas Creek Trail. The proposed park uses are compatible with existing surrounding commercial, residential and agricultural uses. The low-intensity nature of the proposed development is appropriate adjacent to the Uvas Creek natural area, and the farmland to the south of the project site.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- convert prime farmland, unique farmland or farmland of statewide importance (as shown on the maps prepared pursuant to the Farmlands Mapping and Monitoring Program of the California Resources Agency) to non-agricultural use;
- conflict with existing zoning for agricultural use or a Williamson Act contract; or
- involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Significant and Unavoidable Impact–Loss of Prime Farmland. Development of the sports park would result in the loss of 78.4 acres of prime farmland identified in the Farmland Mapping and Monitoring Program over the 20-year build-out of the proposed project. The conversion of prime farmland to non-agricultural uses is considered a significant adverse environmental impact.

Significant and Unavoidable Impact–Loss of Prime Farmland. Approval of the Urban Service Area amendment and development of parcels adjacent to the sports park site, could ultimately result in the loss of the remaining 54.8 acres of designated prime farmland within the project site. A portion of this 54.8 is currently developed with residential and commercial structures relating to the existing agricultural uses on the project site. Property owners of the parcels adjacent to the sports park (and within the Urban Service Area amendment area) could be induced to seek approval for further development of their property. This would be considered a significant adverse environmental impact.

No Impact–Conflict With Williamson Act Contract. Four of the parcels on the project site were previously under Williamson Act contract and expired in January 1999. Therefore, because these parcels are no longer in Williamson Act contract, no additional impact results above those identified in the previous two impact statements.

No Impact–Effect on Adjacent Agricultural Uses. Implementation of the proposed project would not induce the adjacent farmland to be converted to non-agricultural uses. The parcels adjacent to the project site are outside the City of Gilroy 20-year planning area and are unlikely to be developed in the near future.

Mitigation Measures

The loss of prime farmland is generally considered a significant and unavoidable adverse environmental impact. Although development plans have only been proposed for the sports park site, the remainder of the project site could be developed at some time in the future if the Urban Service Area amendment is approved. The City/County adoption of the Gilroy Agricultural Lands Area serves as regional mitigation for the loss of prime farmland in southern Santa Clara County. Although this regional mitigation has been implemented by both the City of Gilroy and the County of Santa Clara, the loss of 133.2 acres of prime farmland could still be considered significant and unavoidable, unable to be mitigated to a less than significant level.

CEQA Guidelines section 15093(a) requires the decision-making agency (City of Gilroy, as well as the Santa Clara County LAFCO) to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable". Section 15093(b) states that when the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

The City of Gilroy is expected to make the following findings regarding the loss of prime farmland prior to approving the project:

- The Gilroy Agricultural Lands Area is at least partial mitigation for the loss of the 133.2 acres of prime farmland;
- The project site is adjacent to urban uses to the north (residential) and east (commercial), and is easily accessed from U.S. Highway 101;
- The sports park is a social benefit highly desired by the City of Gilroy and its citizens;
- There are no alternative sites for the sports park that would not result in the conversion of prime farmland; and
- The project site is in a flood zone, which makes it undesirable for intensive urban development and therefore, was available at a price the City of Gilroy could afford. Alternative sites were not available at a price affordable to the City.

2.2 Geology

Environmental Setting

The project site is located within the seismically-active Santa Clara Valley. The project site is located approximately four miles southwest of the Calaveras fault, three miles northeast of the Sargent fault, and seven miles northeast of the San Andreas fault. These three faults are active and considered capable of producing severe ground shaking events.

Maximum earthquakes capable of occurring under existing known geologic conditions are 8.5 on the Richter scale for the San Andreas fault, 7.5 for the Calaveras fault, and 7.0 for the Sargent fault. It is estimated that an earthquake of magnitude 8.5 on the San Andreas fault has a recurrence interval of 100 to 1,000 years, although it is unknown when the last magnitude 8.5 earthquake occurred on the San Andreas fault. Similarly, a lesser recurrence interval would exist for an earthquake of smaller magnitude.

The Loma Prieta earthquake, which occurred on October 17, 1989, measured 7.1 on the Richter scale and was centered approximately 18 miles northwest Gilroy. The earthquake caused moderate to severe damage to structures in the City of Gilroy.

The west portion of the project site is designated E-1 with moderate potential for liquefaction, and the east section of the project site is designated F-1 with a low potential for liquefaction, according to the *Santa Clara County Relative Seismic Stability Map* (Santa Clara County 1974). According to the Association of Bay Area Governments (ABAG) the project site would experience "moderately high" shaking amplification in the event of a major earthquake (ABAG 1995).

Project Analysis

Based on historic records and on the known seismicity of the area, it is likely that the project site will experience an earthquake of magnitude 6.0 or greater within the next 50 years, as well as numerous smaller earthquakes, all generated within 20 miles of the project site. In the event of a strong earthquake centered along any of the nearby faults, ground shaking at the site will likely be moderate to high.

Most of the project site would be used for at-grade parking and athletic fields. Relatively few structures would be located on the project site. Most structures that would be located on the project site would be small service buildings such as snack vending booths and restrooms that have minimal occupancy loads and are unlikely to suffer substantial damage during an earthquake. The only major building that is included in project plans is the commercial recreation building/community center. As a condition of the building permit all buildings would be required to be built to the standards of the most current edition of the *Uniform Building Code*.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic hazards or landslides.

Less Than Significant Impact–Seismic Hazards. The proposed project presents a small risk of exposing people or structures to potential substantial adverse effects involving seismic hazards or landslides. This risk is associated primarily with the commercial recreation/community center building, the only substantial building proposed for the sports park. Because all structures would be built to the standards of the latest version of the *Uniform Building Code*, the proposed project would have a less than significant impact in terms of geologic hazards, and no mitigation measures are necessary.

2.3 Hydrology

Environmental Setting

A hydrology and drainage report was conducted for substantially the same project site in January 1993 by Cregan and D'angelo. Background information on the Uvas Creek watershed is contained in the U.S. Army Corps of Engineers feasibility study of the Uvas Creek levee (U.S. Army Corps of Engineers 1981). This section is based on information contained in those reports. Water supply, water demand and wastewater generation are discussed in Section 2.4 Public Services and Service Systems. Both of these documents are available for review at the City of Gilroy Planning Division office.

Storm Water Run-off and Flooding

In undeveloped areas, a large proportion of rainfall is absorbed into the soil before storm water begins to run-off into streams. The percentage of storm water that percolates into the soil depends on a number of factors including slope, soil cover (e.g., vegetation) soil type, existing level of saturation and intensity of rainfall. Developed areas contain many surfaces, such as streets and buildings that are impervious to water. When rainfall lands on these surfaces, it drains on the surface and eventually into a drainage pipe or watercourse. Essentially none of the storm water that hits impervious surfaces is absorbed into the surfaces on which it falls.

The difference in run-off between pervious and impervious surfaces varies depending on conditions. Those factors noted above that influence percolation into pervious surfaces affect the relative run-off rates between pervious and impervious surfaces. Under low rainfall conditions, or if the soil is not saturated, a very high

proportion of rainfall infiltrates a pervious surface, and there is very little surface run-off. As the soil becomes saturated or the rainfall intensifies, a higher proportion of the water runs off from pervious surfaces and the difference between run-off from pervious and impervious surfaces can become quite small.

Water flows are not constant along the length of a stream. Following major rainfall, the water level will peak at some point along the stream and the peak flow will move downstream. Flooding occurs when the flow rate exceeds the capacity of the watercourse. The timing of storm water run-off is critical to the effect it will have on flood levels. Storm water that runs off into a watercourse while flood level flows are passing will contribute to flooding. Water that flows into a watercourse outside of flood stage flows, either before or after flood flows pass, will generally not contribute to the flooding.

Regional Setting

Uvas Creek is part of the Uvas-Carnadero Creek drainage basin, which includes the major tributaries of Little Uvas Creek, Little Arthur Creek and Bodfish Creek. The drainage encompasses approximately 90 square miles.

Uvas Dam, constructed in 1957, is approximately 11 miles upstream of the project site. Little Uvas Creek feeds the Uvas Reservoir, which is impounded behind the dam. A levee on the north and east of Uvas Creek was built in 1991, and extends approximately 5,600 feet, including approximately 1,800 feet on the project site. Downstream of U.S. Highway 101 (and approximately three-quarters of a mile south of the project site) Uvas Creek becomes known as Carnadero Creek, until it flows into the Pajaro River. The Pajaro River flows into Monterey Bay near Watsonville.

The width of the Uvas Creek channel varies widely, from four feet wide to over 600 feet wide. In the vicinity of the project site the channel is approximately 100 to 150 feet across bank top to bank top, and very deep.

Project Site Setting

Uvas Creek forms the western and southern boundary of the project site. Most of the project site is within a flood zone (Federal Emergency Management Agency 1998). Areas subject to flooding on the project site can be categorized into three distinct areas: areas that are within a Santa Clara Valley Water District (SCVWD) flood flowage easement, areas outside the flood flowage easement but within the 100-year flood zone, and areas within the 500-year flood zone. Approximately 18 acres of land was removed from FEMA's Zone A area and reclassified as Zone X in April 1991, following completion of the Uvas Creek levee. Zone X areas can be developed with permanent structures subject to the review and approval of the City of Gilroy. Approximately half of the sports park site is within Zone A. The southern portions of the sports park site are in Zone C, an area subject only to minimal flooding, and the northern-most parts of the sports park site are in Zone X.

The project site parcels to the north of the sports park site are located almost entirely in Zone X, while those to the east are primarily Zone A. Flood zone designations on the project site are illustrated in Figure 11.

A 100-year flood or "one-percent flood" is defined as a flood that has a one percent chance of occurring each year, or once on average in 100 years. Areas subject to this level of flooding are classified by the Federal Emergency Management Agency (FEMA) as Zone A. The greatest recorded flood on Uvas Creek occurred in 1986. The estimated peak flow rate for that event was close to FEMA's estimated 100-year flow rate for Uvas Creek. The flow did not exceed the maximum Uvas Creek levee design flow (Kirk Wheeler, personal communication, January 26, 1999).

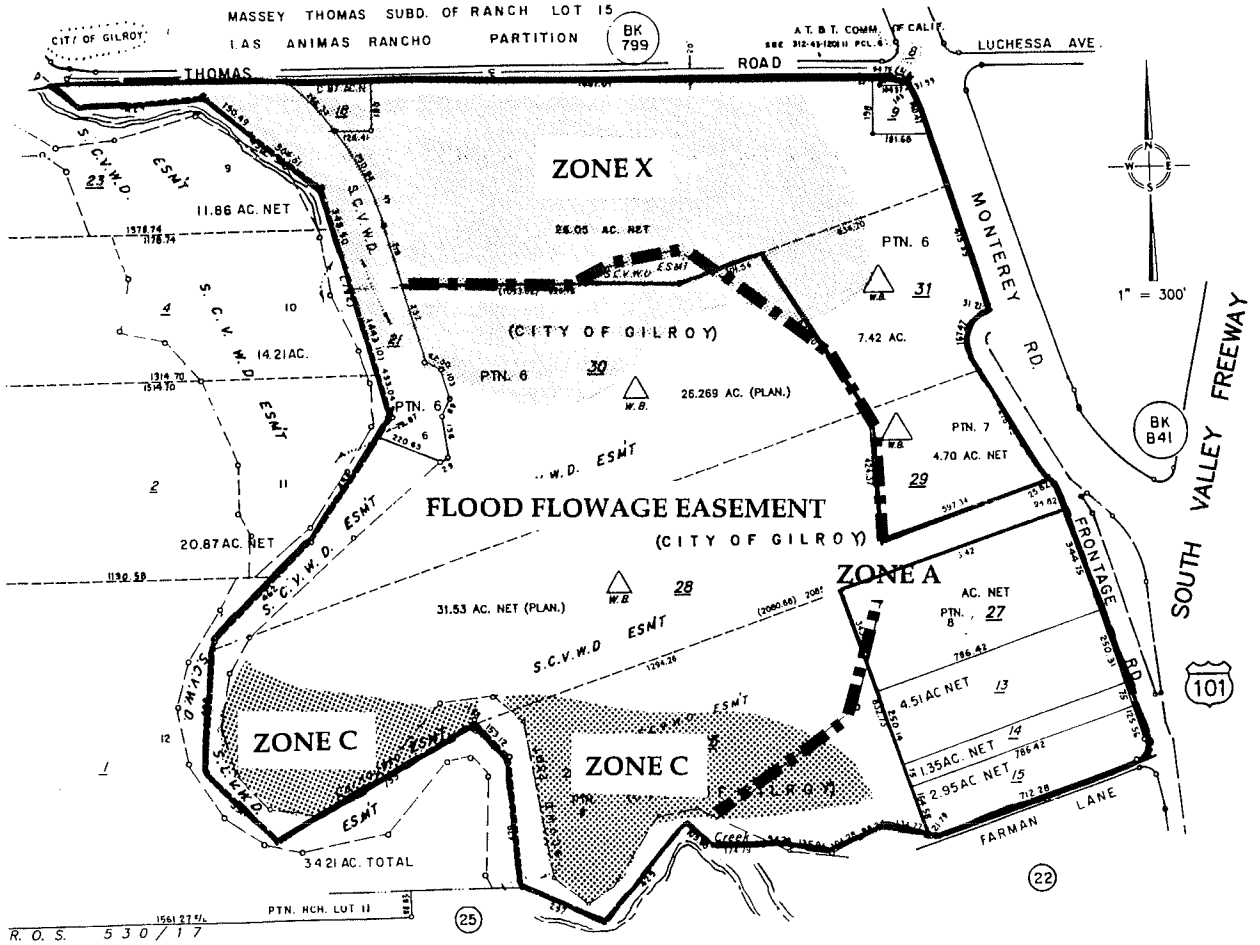
A 500-year flood is defined as a flood that has a two-tenths of a percent chance of occurring each year or once an average in 500 years. Areas that are subject to flooding less than one foot in depth by 100-year floods, or protected by a levee from 100-year floods, or subject to flooding by a 500-year flood are classified by FEMA as Zone X Areas.

Major creeks subject to flooding in southern Santa Clara County are the Pajaro River, Llagas Creek, Uvas Creek and their tributaries. A one-percent flood in southern Santa Clara County would inundate approximately 14,800 acres (County of Santa Clara 1986).

The U.S. Army Corps of Engineers constructed a flood-control levee adjacent to a portion of the project site in 1990. The levee runs along the eastern side of Uvas Creek south from Thomas Road–Luchessa Avenue for approximately 1,800 feet. This levee protects the northern portion of the project site, as well as residential areas to the north of the project site from flooding during 100-year floods. These areas may be subject to floods that exceed the 100-year flood level.

SCVWD has jurisdiction over Uvas Creek and owns the levee on the east of Uvas Creek. Additionally, SCVWD holds a flood flowage easement that restricts land use and development on a large portion of the sports park site. The flood flowage easement encompasses land that was calculated to suffer induced flooding due to the construction of the Uvas Creek levee, that is, flooding to a greater extent than would have been expected prior to the construction of the levee. Approximately 48.95 acres of the project site are within the flowage easement. Uses within the flowage easement are restricted to open space uses that will not inhibit the flow of floodwaters across the land.

The flood flowage easement requires that a park within the flowage easement must be operated and regulated by a public agency. Parking of vehicles left unattended overnight is prohibited within the easement between October 15 and April 15 of every year. No buildings that would interfere with the flow of floodwaters may be constructed within the easement. Portable structures must be removed during the October 15 to April 15 time period. Inappropriate development within this easement could put structures at risk of damage and people at risk of injury or death from storm-related flooding. Structures within the flood flowage easement could impede the flow of floodwaters and result in additional flooding in adjacent areas.



Source: FEMA, City of Gilroy and EMC Planning Group Inc.

No Scale

EMC Planning Group Inc.

A Land Use Planning and Design Firm

Gilroy Sports Park and USA Amendment EIR

Flood Zone Designations

Figure 11

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Areas outside the flowage easement but within the 100-year flood zone are subject to restrictions as outlined in the *City of Gilroy Floodplain Ordinance*. Permanent structures in these areas must have their lowest floor elevation at least one foot above the 100-year flood elevation as indicated on the *FEMA Flood Rate Insurance Maps*.

Project Analysis

Storm Water Run-off

The sports park site is currently undeveloped farmland. A large proportion of the rainfall that lands on the project site soaks into the soil. The general slope of the site is away from Uvas Creek towards Monterey Road. Much of the water that runs off the project site drains to Monterey Road and via a storm drain into Uvas Creek.

The proposed project would include turf areas, access roads, parking lots, pathways and structures. Storm water run-off from these surfaces could, under some conditions, increase the rate of storm water discharge into Uvas Creek and the Pajaro River drainage. However, during flood conditions it is likely that the increase in run-off due to new impervious surfaces would be less than significant, since under these conditions the run-off rate from pervious surfaces is typically high also.

Under some rainfall conditions it is possible that the run-off rate could be lower with the proposed project than with existing conditions. Turf areas may have a lower run-off rate than the existing agricultural fields, and run-off amounts can vary with the intensity of the storm (Kirk Wheeler, personal communication, January 26, 1999).

On-site Flood Water Flowage

The SCVWD flood flowage easement imposes use restrictions on most of the sports park site and a very small portion of one of the remaining parcels on the project site. The flood flowage easement would restrict usage of the sports park site during winter months, but would not completely eliminate usage during that period. The restriction on parking from October 15 to April 15, stated in the flowage easement, would apply only to overnight parking of vehicles and parking during potential flood conditions (William Headley, personal communication, December 1, 1998). Park facilities such as restrooms and backstops would need to be removed from the flowage easement area during the winter or designed by a qualified hydrologist to assure that they do not impede the flow of floodwaters. The commercial recreation building is proposed to be a mostly open tent-like structure through which water could flow with minimal interruption.

The sports park use is generally appropriate for the flood zone area, provided that park facility designs take into consideration the requirements of flood flowage across the site during times of major storm events and flooding.

Storm Water Quality

A variety of contaminants are common to urban area storm water and irrigation run-off. These contaminants include coliform bacteria, sediment, organic chemicals, nutrients and pesticides from landscaping and athletic fields, and fuel constituents, heavy metals, oil and grease from automobiles, roads and parking areas. These contaminants could be transported to the drainage system, polluting downstream water systems. The potential for contamination exists during both the construction and operation of the proposed project.

Water quality degradation is regulated by the Federal National Pollution Discharge Elimination System (NPDES) Program, which was established by the Clean Water Act. The NPDES controls and reduces pollutants to water bodies from point and non-point discharges. In California, the California Regional Water Quality Control Boards (RWQCB) administer the 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 five acres of land during construction are required to file a notice of intent to be covered under the State NPDES General Construction Permit for discharges of storm water associated with construction activities. The applicant must propose control measures that are consistent with the State NPDES General Construction Permit and consistent with recommendations and policies of the local agency and the RWQCB.

The State NPDES General Construction Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site 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.

The SCVWD also requires a project review and permit for any construction that takes place within 50 feet of any watercourse within its boundaries. Because of the flood flowage easement, SCVWD will review project plans to assure that the project will not have any detrimental effects on watercourses, habitat or animals. Portions of the proposed project would involve grading and paving near the top of the Uvas Creek levee. A SCVWD permit may be required for all or some of the construction work at the sports park site.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- violate any water quality standards or waste discharge requirements;

- substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river;
- substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site;
- create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or
- place within a 100-year flood hazard area structures that would impede or redirect flood flows.

Less Than Significant Impact–Storm Water Run-off. The proposed project would include the construction of access roads, parking lots, pathways and structures, which add new impervious materials to the project site. Storm water run-off from these impervious surfaces could increase the rate of storm water discharge into Uvas Creek and the Pajaro River drainage. However, during flood conditions it is likely that the increase in run-off due the new impervious surfaces at the project site would be less than significant.

Potentially Significant Impact–On-Site Flood Flowage. SCVWD holds a flood flowage easement that restricts land use and development on a large portion of the project site. Inappropriate development within this easement could put structures at risk of damage and people at risk of injury or death from storm-related flooding. Structures within the flood flowage easement could impede the flow of floodwaters and result in additional flooding in adjacent areas. Uses within the flowage easement are restricted to open space uses that will not inhibit the flow of floodwaters across the land. Inappropriate development that would place structures or people at risk during flooding or the impedance of flood waters across the project site would be significant environmental impacts. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

1. The City shall have a hydrology report prepared for the project by a qualified hydrologist or engineer, to address hydrology-related design requirements for the site and buildings, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to issuance of a grading permit. All grading, design or other recommendations of this report shall be incorporated into project plans.

Significant Impact–Surface Water Quality. During construction, grading will expose sediments to rain or wind erosion and subsequent transportation of sediments to the Uvas Creek, Pajaro River and Monterey Bay. The silt load that could be generated could degrade the quality of water in the Uvas Creek, Pajaro

River and Monterey Bay by transporting other pollutants adhered to sediments, obstructing natural flow patterns at the points of sediment deposition, or adversely affecting biological resources.

Materials used and wastes generated during construction would degrade water quality also. Wastes generated commonly include wash water from concrete mixers, paints and painting equipment cleaning activities, oil, grease and fuel constituents from vehicle use, storage and maintenance, solid wastes from tree and shrub removal during land clearing, and wood and paper materials from packaging of building products.

Development of the sports park would increase the amount of runoff from the site under some weather conditions by adding new impervious surfaces and would generate non-point source pollutants from newly established urban activity at the project site. The runoff would contain pollutants typical of urban activity, such as oil and grease, fuel constituents, heavy metals, organic chemicals, bacteria, and sediments. These pollutants would degrade the quality of the surface waters in Uvas Creek, Pajaro River and Monterey Bay.

Introduction of pollutants into a watercourse is a significant environmental impact. With implementation of the following mitigation measures, water quality degradation would be reduced to a less than significant level.

Mitigation Measures

2. The City shall, for each phase of the project, submit a Notice of Intent (NOI) and detailed engineering designs to the Central Coast RWQCB. This permit shall require development and implementation of a SWPPP that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site. The SWPPP must include Best Management Practices that address source reduction and, if necessary, shall include practices that require treatment. The SWPPP shall be submitted to the City of Gilroy Engineering Division for review and approval prior to approval of a grading permit for each phase of the project.

3. The City shall submit plans for review by, and obtain an approved permit from the Santa Clara Valley Water District (SCVWD) prior to approval of a grading permit for each phase of the project.

2.4 Public Services and Service Systems

Environmental Setting

The project site is located in unincorporated Santa Clara County. Services on the project site are currently provided by agencies other than the City of Gilroy, provided on-site by the property owner, or unavailable.

Water. Existing water on the project site is from on-site private wells. A municipal water supply line is located beneath Monterey Street, just east of the project site.

The existing recycled water supply line originates at the wastewater treatment plant southeast of Gilroy, runs northwesterly until it meets the Princevalle drainage channel, then follows the channel westward through Christmas Hill Park to Santa Teresa Boulevard.

Wastewater. Existing residences on the project site are served by individual septic systems. Municipal wastewater trunk lines are located beneath Monterey Street, just east of the project site and beneath Thomas Road–Luchessa Avenue, just north of the project site.

Storm Drain. The project site is not currently served by storm drains. All storm water runoff is carried over the surface and/or percolates into the ground.

Police Protection. Police protective services at the project site are currently provided by the Santa Clara County Sheriff's Department.

Fire Protection. Fire protective and emergency medical response services are currently provided by the South Santa Clara County Fire Department (SSCCFD). SSCCFD stations are located at U.S. Highway 101 and Masten Road, and at State Highway 152 and Burchell Road. The City of Gilroy has an automatic aid agreement with SSCCFD. Under this agreement, the first engine company that is able to reach an emergency responds automatically. The City of Gilroy Fire Department is located 1.5 miles from the project site and would generally be the first fire company to respond to the project site.

Project Analysis

With the addition of the project site to the Urban Services Area, the City of Gilroy will assume responsibility for the provision of services. At this time the sports park is the only development proposed for the project site. The remaining parcels will remain designated OPEN SPACE and are expected to remain in agriculture at this time. When those parcels are developed in the future there will be additional public services needs. Development of these parcels will require additional environmental review.

Specific development plans are available for the proposed sports park and trail extension, and potential alignments are known for the extension of the recycled water distribution line. These are discussed in further detail below. The primary utility corridor into the project site would follow the access road from Monterey Frontage Road.

Sports Park Area

Water. The sports park would be served by a potable domestic water supply for drinking, bathroom fixtures and general use, and a reclaimed wastewater supply for

irrigation. The projected annual demands were calculated by the beals group inc. for project build-out conditions.

The City of Gilroy would provide potable water from the main located beneath Monterey Street. The sports park is expected to require 26 acre-feet of potable water annually. The City of Gilroy has an adequate supply of potable water available to meet the total potable water demand projected at the sports park.

The City of Gilroy would provide recycled water for irrigation of the athletic fields and landscaping. The sports park would require in the range of 184 to 245 acre-feet of irrigation water annually. The City of Gilroy has an adequate supply of recycled water available to meet this demand.

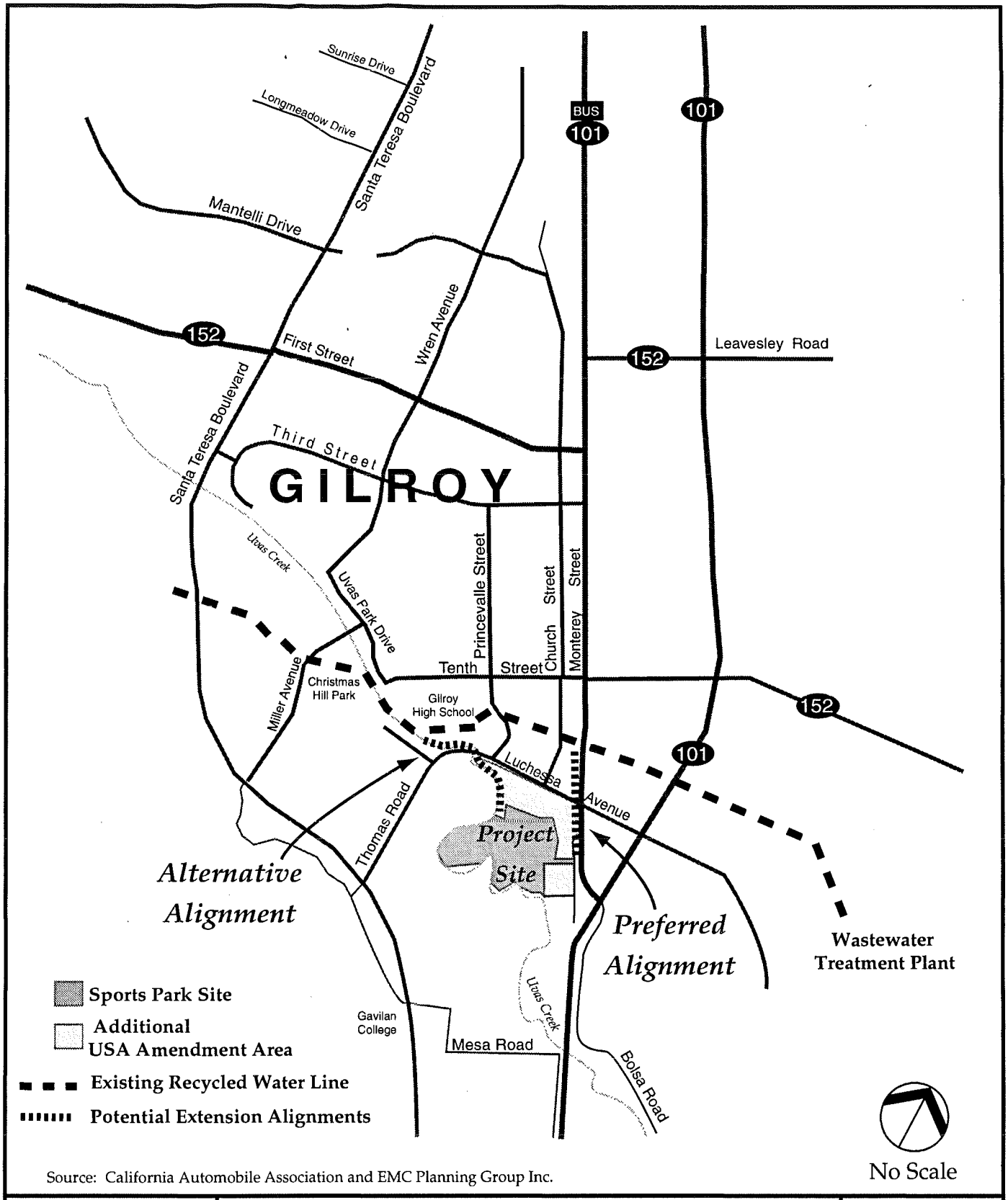
The recycled water distribution line does not currently serve the project site. An extension of the distribution line would be built from the existing line along the Princevalle channel. The preferred alignment follows Monterey Street. An alternative alignment follows Uvas Creek, to the east of the levee. The location of the existing recycled water distribution line and possible extensions are shown in Figure 12.

Wastewater. The City of Gilroy would provide sanitary sewer services to the project site. The City of Gilroy sanitary sewer system includes a network of trunk sewers (greater than or equal to 10 inches in diameter) that generally flow from west to east and discharge into an interceptor sewer on the west side of Highway 101 that carries flow south to the Gilroy/Morgan Hill Wastewater Treatment Plant (Camp Dresser & McKee Inc. 1993). The project site would connect to the trunk line beneath Monterey Street.

The beals group inc. calculates that the proposed sports park would generate approximately 22 acre-feet of wastewater annually at project build-out. The City of Gilroy wastewater treatment plant has adequate capacity to accommodate the additional wastewater.

Storm Drain. As part of the construction of the sports park and road improvements, a system of storm drains would be constructed to channel storm water runoff. Storm water is discussed in Section 2.3 Hydrology.

Police Protection. The City of Gilroy would provide police protective services to the proposed sports park. The Gilroy Police Department has a staff of 92 people. Of these, 57 are sworn officers and 35 are non-sworn personnel (Kathy Sakahara, personal communication, December 3, 1998). The police station is located near the corner of Sixth Street and Rossanna Street, approximately 1.5 miles from the sports park site. The City of Gilroy Police Department is staffed on a per capita basis, so no additional police officers would be required as a result of the development of the sports park. Police would respond to incidents at the sports park on a demand basis. Sports park personnel would provide monitoring of the site during events, and call for police assistance if needed.



Source: California Automobile Association and EMC Planning Group Inc.

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Gilroy Sports Park and USA Amendment EIR

Recycled Water Distribution Line

Figure 12

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The sports park site would be fenced around most of its periphery and the access road would be gated at sunset, or after the close of nighttime events. A caretaker would live on-site to provide additional security.

Emergency access within the site would be provided via the access road, parking lots and pedestrian pathways. The pedestrian pathways would be built to acceptable standards for emergency vehicle use. Secondary emergency ingress to the site would be available from Farman Lane and the Uvas Creek Trail.

The proposed project would enlarge the geographic range of coverage for the police department but would not require the addition or enlargement of facilities or the addition of equipment or personnel. The enlarged coverage area is adjacent to existing service areas and police will be able to respond within an acceptable period of time.

Fire Protection. The City of Gilroy Fire Department would provide fire protective and emergency medical response services to the proposed sports park. The nearest fire station is located at Chestnut Street and Ninth Street, approximately 1.5 miles from the sports park site.

Emergency access within the site would be provided via the access road, parking lots and pedestrian pathways. The pedestrian pathways would be built to acceptable standards for emergency vehicle use. Secondary emergency ingress to the site would be available from Farman Lane and the Uvas Creek Trail.

The proposed project would enlarge the geographic range of coverage for the fire department but would not require the addition or enlargement of facilities or the addition of equipment or personnel. The enlarged coverage area is adjacent to existing service areas and can be reached from the fire station well within the fire department's emergency response time standard. The City of Gilroy Fire Department is currently the first responding company to the project site, and is reimbursed through an automatic aid agreement with SSCCFD.

Uvas Creek Trail

Police Protection. The City of Gilroy would provide police protective services to the proposed Uvas Creek Trail extension. The City of Gilroy Police Department is staffed on a per capita basis, so no additional police officers would be hired as a result of the development of the trail. Police would respond to incidents on the trail on a demand basis. No emergency telephones are indicated on project plans, so calls would need to be made from the nearest public telephone or residence. The trail would be built to acceptable standards for emergency vehicle use.

Fire Protection. The City of Gilroy Fire Department would provide fire protective and emergency medical response services to the proposed sports park. The nearest fire station is located at Chestnut Street and Ninth Street, approximately 1.5 miles from the sports park site. The trail would be built to acceptable standards for emergency vehicle use.

Recycled Water Line

The recycled waste water line would be extended to the sports park site by one of two possible routes: the preferred route is beneath Monterey Street and Monterey Frontage Road; the alternatively route is along Uvas Creek, east of the levee. The placement of the recycled water line on the Monterey Street alignment would result in less than significant environmental impacts. The placement of the recycled water line along the Uvas Creek alignment could result in the disturbance of riparian woodland habitat during construction activities. These potential effects are discussed in detail in Section 2.5 Biological Resources.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- result in substantial adverse physical impacts or significant environmental impacts associated with the provision of new or physically altered governmental facilities, in order to maintain acceptable services ratios, response times or other performance objectives for fire protection, police protection, schools, parks or other facilities;
- fail to meet wastewater treatment requirements of the applicable Water Quality Control Board;
- require or result in the construction of new water or wastewater treatment facilities or storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- result in a substantial depletion of water supply or solid waste disposal capacity.

Less Than Significant Impact–Construction of Water, Wastewater and Storm Drain Infrastructure. The proposed project does not require substantial extensions or upgrades to the existing potable water supply, wastewater or storm drain infrastructure. The proposed project would have a less than significant impact on these systems. Mitigation measures are not necessary.

Potentially Significant Impact–Recycled Water Distribution Line Construction. Construction activities on the Uvas Creek bank also have the potential to produce erosion or accidental spills of contaminants or other harmful materials which could decrease habitat quality and interfere with the movement or well-being of special-status species potentially occurring in the riparian habitat. This would be a potentially significant impact. Implementation of mitigation measures presented in Section 2.5 Biological Resources would reduce this impact to a less than significant level. These mitigation measures would require siltation fencing, hay bales or other erosion control measures to be installed along the portion of Uvas Creek occurring on the project site to prevent sediment from filling the creek, and the preparation of a spill abatement and clean-up plan.

No Impact–Water Supply. The proposed project would result in a minimal increase in demand for potable water. The City of Gilroy has adequate water supplies to meet the projected demand for potable water. The proposed project would increase demand for recycled water for irrigation. The City of Gilroy has an adequate supply of recycled water to meet the projected demands. Mitigation measures are not necessary.

No Impact–Police and Fire Services. The proposed project does not result in the need for additional facilities for the provision of police or fire services, and would not decrease the level of these services provided to any part of the community. The proposed project would have no physical impact to the environment associated with the provision of police or fire services. Mitigation measures are not necessary.

2.5 Biological Resources

Environmental Setting

A reconnaissance-level biological survey was conducted by LSA Associates, Inc. in January 1993 to identify biological resources occurring or potentially occurring on the project site, including vegetation types, significant wildlife habitat features, and the potential for the presence of special-status plant and animal species. The project site was resurveyed by a biologist from EMC Planning Group Inc. in November 1998 to field-check and update the 1993 biological survey. The following discussion includes information contained in the 1993 biological survey and updated information provided by the 1998 survey.

Habitats observed in the project site include agricultural land, Uvas Creek and associated riparian woodland habitat, and landscape plants associated with existing and former residences. Figure 13 illustrates the habitat types observed on the project site.

The following discussion describes those plant and animal species that were observed during the 1993 and/or 1998 survey, or that would be expected to commonly occur in habitats present on the project site.

Agricultural. The majority of the project site is in agricultural row crop production and does not contain naturally-occurring plant species.

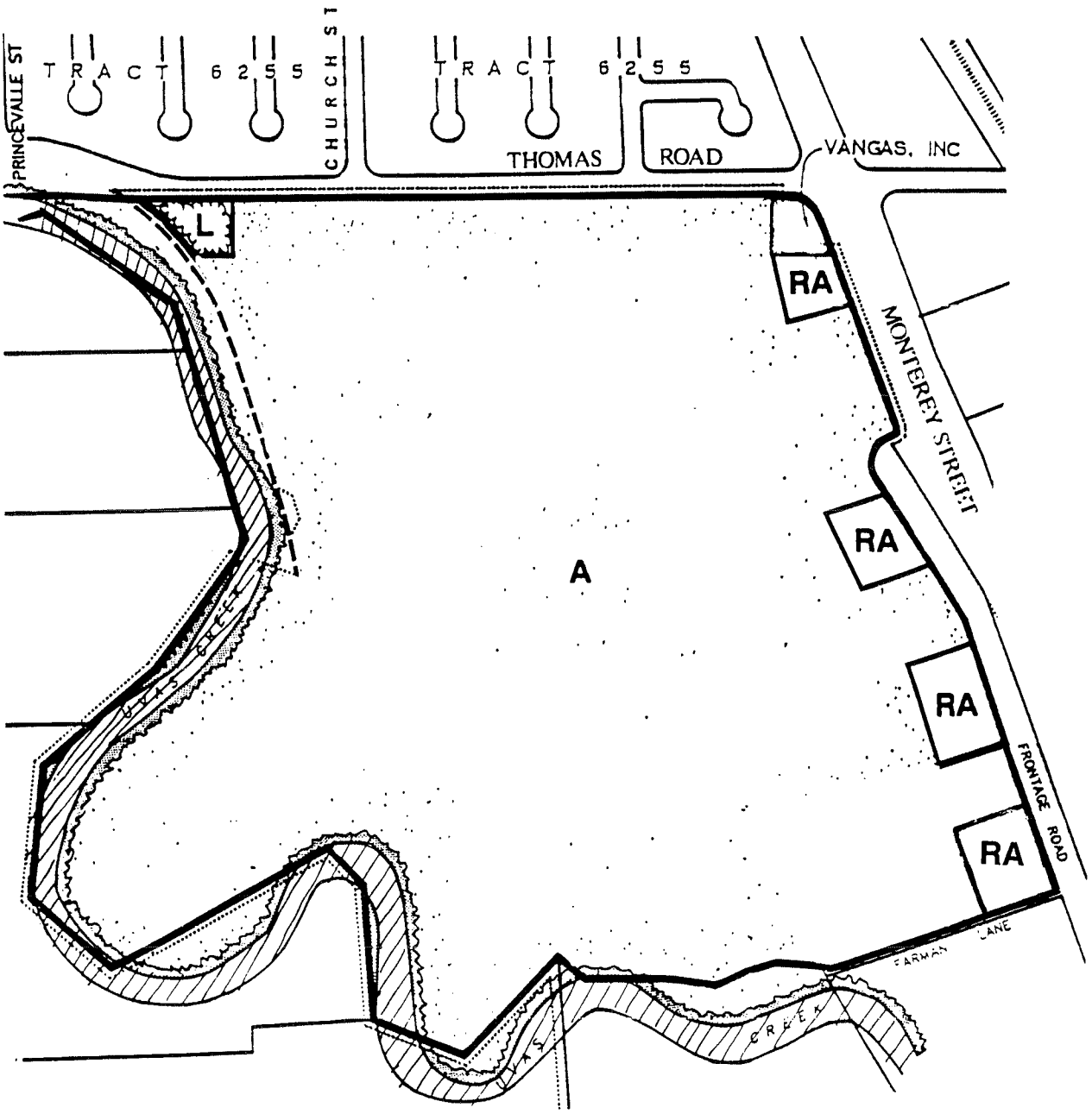
Due to continuous human interaction, agricultural fields typically provide little habitat for wildlife. No bird species were observed foraging in the agricultural land; however, turkey vulture (*Cathartes aura*), American crow (*Corvus brachyrhynchos*), and gulls (*Larus* spp.) were observed flying over the field. Crows and songbirds may forage in the cultivated fields and small mammals (e.g. pocket gophers, ground squirrels, and black-tailed hares) may also forage and burrow in the fields assuming they are not actively controlled in the area. Larger mammals such as coyotes and foxes may also utilize cultivated fields for hunting and foraging but are not likely to inhabit these areas.

Uvas Creek. Uvas Creek, and the associated riparian woodland habitat (described below), is the most significant biological resource on the project. Willows (*Salix* spp.) and mugwort (*Artemisia douglasiana*) are the most common shrubs along the border of the creek channel. Annual grasses and forbs grow in the creek channel in the dry season. Vegetation in the channel is subject to removal by increased flow during the rainy season. There are no wetlands or waters of the United States on the project site other than Uvas Creek and associated temporary pools in the creek channel. Adult steelhead (*Oncorhynchus mykiss irideus*), a federally threatened species (discussed further below), is known to migrate upstream in Uvas Creek to spawn in winter and early spring. They rest in pools and spawn in shallow riffles. Other native and introduced fish, crayfish, and bullfrogs have been reported from the Uvas Creek Preserve upstream of the project site.

Riparian Woodland. A narrow riparian corridor with an average width estimated to be approximately 25 feet from the centerline of Uvas Creek to the edge of canopy borders each side of the creek, although riparian vegetation is absent in some areas along the creek. A dirt road used for the adjacent agricultural operations is located along the entire edge of the riparian corridor. The riparian corridor supports a diversity of vegetation and provides valuable wildlife habitat. The dominant plant species in this corridor include mature western sycamore trees (*Platanus racemosa*), coast live oak (*Quercus agrifolia*) and valley oak (*Quercus lobata*), Fremont's cottonwood (*Populus fremontii*), willow thickets, and California blackberry (*Rubus ursinus*). Eucalyptus (*Eucalyptus* spp.), black walnut (*Juglans hindsii*) and English walnut (*Juglans regia*) are occasional components of the riparian vegetation on the project site. Riparian woodland habitat is protected by the California Department of Fish and Game (discussed further below).

Open areas in the riparian woodland habitat, the edge between riparian woodland habitat and the agricultural field, and the levee in the northwest portion of the project site are dominated by non-native annual grasses and forbs. Common species include oat (*Avena* spp.), ripgut brome (*Bromus diandrus*), thistles (*Centaurea solstitialis, Cirsium vulgare, Silybum marianum*), mallow (*Malva* spp.), and mustards (*Brassica* spp.).

The large oak and sycamore trees provide excellent roost and nesting sites for raptors and other bird species, and the continuous tree canopy contributes to its value as a corridor for wildlife. White-crowned sparrows (*Zonotrichia leucophrys*), yellow-rumped warblers (*Dendroica coronata*), bushtits (*Psaltriparus minimus*), scrub jays (*Aphelocoma coerulescens*), black phoebe (*Sayornis nigricans*), and northern flickers (*Colaptes auratus*) were observed in the riparian vegetation between the agricultural fields and Uvas Creek. Holes drilled by red-breasted sapsucker (*Sphyrapicus ruber*) were observed in the trunks of riparian trees. A red-shouldered hawk (*Buteo lineatus*) was observed in the riparian woodland south of Farman Lane south of the project site, and red-tailed hawk (*Buteo jamaicensis*), sharp-shinned hawk (*Accipiter striatus*), and American kestrel (*Falco sparverius*) were seen in the riparian woodland on the project site.



Legend

- Proposed Boundary of USA Amendment Request
- Riparian Vegetation
- Levee Road

- **A** Agriculture
- **L** Landscape Trees
- **RA** Residence and Agriculture

No Scale

Source: LSA Associates and EMC Planning Group Inc.

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy Sports Park and USA Amendment EIR

Habitat Types

Figure 13

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Grasses and forbs in the riparian understory harbor insects and provide seed and nesting material for sparrows, finches, and small mammals. Botta's pocket gopher (*Thomomys bottae*) burrows were observed in loose soil among non-native grasses bordering the levee.

Landscape Trees. In the northwest corner of the project site, mature landscape plantings of trees and shrubs persist around a former home site. Tree species in this area consist of incense cedar (*Calocedrus decurrens*), eucalyptus, pepper tree (*Schinus molle*), coast redwood (*Sequoia sempervirens*), and California fan palm (*Washingtonia filifera*).

Along the eastern project site boundary of Monterey Frontage Road, houses, outbuildings, and associated landscape plantings alternate with cultivated fields.

The mature landscape trees in the north corner of the project site provide a food source for birds, squirrels, and other small mammals. The large trees provide perching and nesting sites close to Uvas Creek and a source of food for resident and migratory birds.

Special-Status Species

Data from the U. S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), California Department of Fish and Game (CDFG), and California Native Plant Society (CNPS), as well as local knowledge and the 1993 biological survey report, were reviewed to determine the potential for any special-status species to occur in any areas associated with the proposed project. Special-status species include species listed or proposed for listing by the USFWS, NMFS, CDFG, and/or CNPS as endangered, threatened, or species of special concern."

Special-status species that have the potential to be found on the project site are listed in Table 3, along with their legal status and habitat requirements. This list was determined by evaluating the geographic ranges and habitat requirements of each species and habitat conditions at the project site.

Plants. The CDFG Natural Diversity Database (Chittenden and Gilroy quadrangles) reports three special-status native plant species occurring within the vicinity of the project site, including Metcalf canyon jewelflower (*Streptanthus albidus* ssp. *albidus*), most beautiful jewelflower (*Streptanthus albidus* ssp. *peramoenus*), and Santa Clara Valley dudleya (*Dudleya setchellii*). These plant species are restricted to serpentine soils. Since serpentine soils are not present on the project site, and since natural conditions on the project site have been disturbed by long-term agricultural use, it would be extremely unlikely that any of these species would occur on the site.

TABLE 3

Potential Special-Status Species

Species	Status (Federal/State/CNPS)	Habitat
Plants:		
None	--	--
Wildlife:		
California tiger salamander *Ambystoma californiense*	Candidate/CSC	Grassland with seasonal water source
Western spadefoot toad *Scaphiopus hammondii*	FSC/CSC	Upland areas with seasonal water source
Foothill yellow-legged frog *Rana boylii*	FSC/CSC	Upland areas associated with rock-bottomed creeks
California red-legged frog *Rana aurora draytonii*	FT(USFWS)/CSC	Lowlands/foothills near permanent deep water sources
Western pond turtle *Clemmys marmorata*	FSC/CSC	Aquatic habitat
Steelhead *Oncorhynchus mykiss irideus*	FT(NMFS)/--	Aquatic habitat
Burrowing owl *Athene cunicularia*	FSC/CSC	Nests and winters in small mammal burrows in grasslands
Nesting raptors/active raptor nests	--/CSC	Tall trees in woodland areas

FT(USFWS): Listed as "Threatened" by the USFWS.
FT(NMFS): Listed as "Threatened" by the NMFS.
Candidate: A candidate for listing as threatened or endangered by the USFWS.
FSC: USFWS "Special Concern". Prior to February 1996, the USFWS identified these species as "Category 2" candidates for listing (taxa for which information in the possession of the USFWS indicated that proposing to list as endangered or threatened was possibly appropriate, but for which sufficient data on biological vulnerability and threat were not currently available to support proposed rules). The designation of Category 2 species as candidates resulted in confusion about the conservation status of these taxa. To reduce that confusion, and to clarify that the USFWS does not regard these species as candidates for listing, the USFWS has discontinued the designation of Category 2 species as candidates. The USFWS remains concerned about these species, but further biological research and field study are needed to resolve the conservation status of these taxa.
CSC: CDFG "Species of Special Concern". The CDFG "Species of Special Concern" does not afford these species any federal or state protection. These species should be taken into special consideration when decisions are made concerning the future of any land parcel. A species is included as a "Species of Special Concern" when their breeding populations in California are declining. Species are also included that are not declining worldwide, but in California the population is so low that it is potentially vulnerable to extirpation.

Source: USFWS and CDFG

Wildlife. The CDFG Natural Diversity Database (Chittenden and Gilroy quadrangles) reports several special-status animal species occurring within the vicinity of the project site, including California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana aurora draytonii*), western pond turtle (*Clemmys marmorata*), burrowing owl (*Athene cunicularia*), bank swallow (*Riparia riparia*), and tricolored blackbird (*Agelaius tricolor*). In addition, steelhead are known to migrate in Uvas Creek, and raptor nests could potentially be present in the riparian woodland trees on the project site. Other species not listed on the Natural Diversity Database that have the potential to occur on the project site include western spadefoot toad(*Scaphiopus hammondii*) and foothill yellow-legged frog (*Rana boylii*).

Of those species listed on the Natural Diversity Database reports, bank swallow and tricolored blackbird most likely do not occur on the project site. Bank swallows require vertical banks or cliffs with fine-textured sandy soils to dig a nesting hole. The portion of Uvas Creek that occurs on the project site does not contain appropriate habitat for nesting bank swallows. Likewise, tricolored blackbirds typically nest in colonies in marshes or other open water areas, and no appropriate habitat for tricolored blackbirds occurs on the project site.

Also, while not listed on the Natural Diversity Database reports, the project site was evaluated for potential use by other special-status species, including San Joaquin whipsnake (*Masticophus flagellum ruddocki*), pallid bat (*Antrozous pallidus*), and Townsend's western big-eared bat (*Corynorhinus townsendii townsendii*). These species most likely do not occur on the project site. San Joaquin whipsnakes are found in grassland habitats, and pallid and Townsend's western big-eared bats are found in deserts, pine forests and canyons with roost sites (caves, cliff overhangs and buildings). No appropriate habitat for these species occurs on the project site.

The potential occurrence of the other species listed on the Natural Diversity Database (NDDB) reports is discussed below.

- *California tiger salamander.* The California tiger salamander is a candidate for listing as threatened or endangered by the USFWS, and is designated as a "Species of Special Concern" by the CDFG. Tiger salamanders primarily occur in valley floor and foothill grasslands. Adults utilize rodent burrows for refuge during the non-breeding season and, during the rainy season, they migrate to aquatic breeding sites, such as seasonal ponds, reservoirs, lakes, and occasionally stream pools.

  No California tiger salamanders were observed on the project site during the 1993 and 1998 field surveys. The NDDB lists known occurrences of California tiger salamanders near Tick Creek (four miles south of Gilroy), near the intersections of Castro Valley Road and Old Monterey Street with U.S. Highway 101 (three and four miles south of Gilroy, respectively), and in Farman Canyon pond and Reservoir Canyon Pond on the O'Connell Ranch in Gilroy (approximately 2.5 miles south of the project site). Breeding habitat for the California tiger salamander is potentially present in pools adjacent to the

Uvas Creek bed. However, it would be highly unlikely that they would occur on the majority of the project site due to the long history of agricultural disturbance.

- *Western spadefoot toad.* The western spadefoot toad is designated as a "Species of Special Concern" by the USFWS and CDFG. Western spadefoot toads primarily occur in upland areas near aquatic breeding sites, such as seasonal ponds, reservoirs, lakes, and stream pools.

  No western spadefoot toads were observed on the project site during the 1993 and 1998 field surveys, and the NDDB does not contain any listings of occurrences of western spadefoot in the project vicinity. However, western spadefoot habitat is potentially present in pools adjacent to the Uvas Creek bed. However, it would be highly unlikely that they would occur on the majority of the project site due to the long history of agricultural disturbance.

- *Foothill yellow-legged frog.* The foothill yellow-legged frog is designated as a "Species of Special Concern" by the USFWS and CDFG. Foothill yellow-legged frogs primarily occur in upland areas near rock-bottomed creek breeding sites.

  No foothill yellow-legged frogs were observed on the project site during the 1993 and 1998 field surveys, and the NDDB does not contain any listings of occurrences of foothill yellow-legged frogs in the project vicinity. However, foothill yellow-legged frog habitat is potentially present in Uvas Creek. However, it would be highly unlikely that they would occur on the majority of the project site due to the long history of agricultural disturbance.

- *California red-legged frog.* The California red-legged frog is listed as threatened by the USFWS, and is designated as a "Species of Special Concern" by the CDFG. California red-legged frogs occur in different habitats depending on their life stage and the season. All life history stages are most likely to be encountered in and around breeding sites, which include many aquatic habitats, such as ponded and backwater portions of streams. Creeks and ponds where California red-legged frogs are found often have dense growths of woody riparian vegetation, especially willows. The presence of this kind of vegetation is an important indicator that the site may provide foraging or breeding habitat for California red-legged frogs.

  No California red-legged frogs were observed on the project site during the 1993 and 1998 field surveys. The NDDB lists known occurrences of red-legged frogs along Tick Creek (three to four miles south of Gilroy), near the intersection of Old Monterey Street with U.S. Highway 101 (four miles south of Gilroy), and along the Pajaro River near the U.S. Highway 101/25 interchange (four miles southeast of Gilroy). California red-legged frogs may potentially occur and breed in seasonal pools in the Uvas Creek channel, and may potentially disperse to the adjacent riparian woodland after the end of

the rainy season. However, it would be highly unlikely that they would occur on the majority of the project site due to the long history of agricultural disturbance.

- *Western pond turtle.* The western pond turtle is designated as a "Species of Special Concern" by the USFWS and CDFG. Western pond turtles are aquatic turtles that live in ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. They need basking sites and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.

  No western pond turtles were observed on the project site during the 1993 and 1998 field surveys, and the NDDB does not contain any listings of occurrences of western pond turtles in the project vicinity . Western pond turtles are potentially present in Uvas Creek Preserve north of the project site. Western pond turtle habitat is potentially present in pools adjacent to the Uvas Creek bed. However, it would be highly unlikely that they would occur on the majority of the project site due to the long history of agricultural disturbance.

- *Steelhead.* Steelhead is listed as threatened by the NMFS but is given no special status by the CDFG. Steelhead spend the first few years of their lives in fresh water before migrating to the ocean. They return to their spawning grounds as adults to breed.

  Steelhead are known to migrate and spawn in gravel areas in Uvas Creek.

- *Burrowing owl.* The burrowing owl is designated as a "Species of Special Concern" by the USFWS and CDFG. Burrowing owls nest and winter in burrows in the ground, especially in abandoned ground squirrel burrows. Optimal habitat conditions include large, open grasslands or prairies.

  No burrowing owls were observed on the project site during the 1993 and 1998 field surveys, and no California ground squirrels (*Spermophilus beecheyi*) or their burrows were observed during the field surveys. The NDDB lists known occurrences of burrowing owls along the Pajaro River near the U.S. Highway 101/25 interchange (four miles southeast of Gilroy). Potential owl habitat exists along the slope of the levee in the northwest corner of the site.

- *Raptor nests.* Nesting raptors and active raptor nests (i.e., nests in which raptors are breeding or raising young) are protected by the CDFG. Raptors, including white-tailed kite, northern harrier, Cooper's hawk, and short-eared owl, could potentially maintain active raptor nests in the riparian woodland habitat on the project site during the breeding season.

Urban Service Area Amendment Area

The Urban Service Area amendment area contains all of the habitat types and the potential for all of the special-status species described above. The majority of the area contains agricultural fields with low habitat value. Uvas Creek and the associated riparian woodland habitat are located along the western boundary of the

Urban Service Area amendment area. The mature landscape trees associated with a former home site are located in the northwest corner of the Urban Service Area amendment area.

Sports Park Area

The sports park site contains all of the habitat types (with the exception of the mature landscape trees) and the potential for all of the special-status species described above. The majority of the sports park site contains agricultural fields with low habitat value. Uvas Creek and the associated riparian woodland habitat are located along the western boundary of the sports park site.

Uvas Creek Trail

The Uvas Creek trail will pass through all of the habitat types (with the exception of the mature landscape trees) with the potential for all of the special-status species described above. The northern end of the trail extension along the north side of Thomas Road-Luchessa Avenue is proposed to be constructed in an area currently vegetated with pines, live oaks, and small landscaping plants and shrubs. Some of the live oaks in this area could be considered to be "significant" trees as defined in the *City of Gilroy Consolidated Landscaping Policy*. "Significant" trees are defined to be native trees that are six inches or more in diameter at a point four and one half feet above the ground, as well as other trees that are important to the historical or visual aspect of Gilroy. After crossing Thomas Road-Luchessa Avenue, the Uvas Creek trail will pass through disturbed non-native grasses and thistles along the levee road and continue south approximately 50 feet from the top of the Uvas Creek bank and outside of the riparian woodland habitat. The trail will pass through the riparian corridor, another area containing "significant" trees, leading to and from a pedestrian bridge over Uvas Creek, and then continue south of Uvas Creek to Mesa Road and to Gavilan Community College.

Recycled Water Line Area–Potential Uvas Creek Alignment

The east side of the Uvas Creek levee is a potential alignment of the proposed recycled water distribution line. If the recycled water distribution line is built along this alignment, the distribution line would pass through open space behind residential areas and through agricultural land.

Project Analysis

Urban Service Area Amendment Area

No development plans currently exist for those areas of the Urban Service Area amendment outside of the sports park site and the Uvas Creek trail. These parcels are expected to remain in agricultural use in the near term.

Sports Park Area

Development of the sports park site would result in the conversion of existing agricultural fields into play fields and facilities associated with the sports park. The existing agricultural fields do not represent a significant biological resource since the fields do not provide habitat for naturally occurring plants and provide only marginal habitat for wildlife. However, development of the sports park site may create increased night-time lighting and may allow increased access to Uvas Creek by people and domestic animals that could harm or kill wildlife species or disrupt the ability of wildlife to disperse or travel along the riparian corridor.

Uvas Creek Trail Area

Construction of the Uvas Creek trail will involve minor grading, excavation and paving outside of the existing riparian woodland habitat, as well as through a small part of the riparian habitat leading to and from a pedestrian bridge over Uvas Creek in the southwestern portion of the project site. The Uvas Creek trail will pass through areas containing trees on the north side of Thomas Road-Luchessa Avenue, in the riparian habitat, and on the north side of Mesa Road, and some of these trees may be "significant" trees as defined by the *City of Gilroy Consolidated Landscaping Policy*.

The Uvas Creek trail is proposed to be located a minimum of 50 feet from the top of the Uvas Creek bank. Since the existing riparian corridor is no more than 25 feet wide (from creek centerline to edge of canopy) in most areas of the project site, and since riparian vegetation is absent in some areas along the creek, the proposed 50-foot habitat buffer will substantially increase the amount of habitat and provide an adequate buffer since the area outside of the buffer will include the trail, native grass plantings, and/or turf areas associated with the sports park. No buildings or other permanent development is proposed to be located near the buffer area. The currently unvegetated portion of the 50-foot buffer area west of the trail will be planted with locally-obtained native grasses and riparian species, which will replace the existing dirt road along the edge of the existing riparian corridor, as well as a portion of the existing agricultural fields west of the proposed pedestrian trail. The habitat buffer area will transition from native grasses near the pedestrian trail, to native shrubs and riparian understory vegetation near Uvas Creek. Wherever possible, the east side of the trail will be planted with native grasses or other native species to provide additional native habitat before giving rise to the turf playfields.

Figures 14 and 15 illustrate the current and proposed condition along Uvas Creek, respectively.

Recycled Water Line

If the recycled water distribution line is installed east of the Uvas Creek levee, construction activities would include excavation and grading in open space and agricultural land separated from Uvas Creek by the levee. The potential exists that

construction activities would cause erosion along the levee or that hazardous materials could spill and contaminate the riparian habitat.

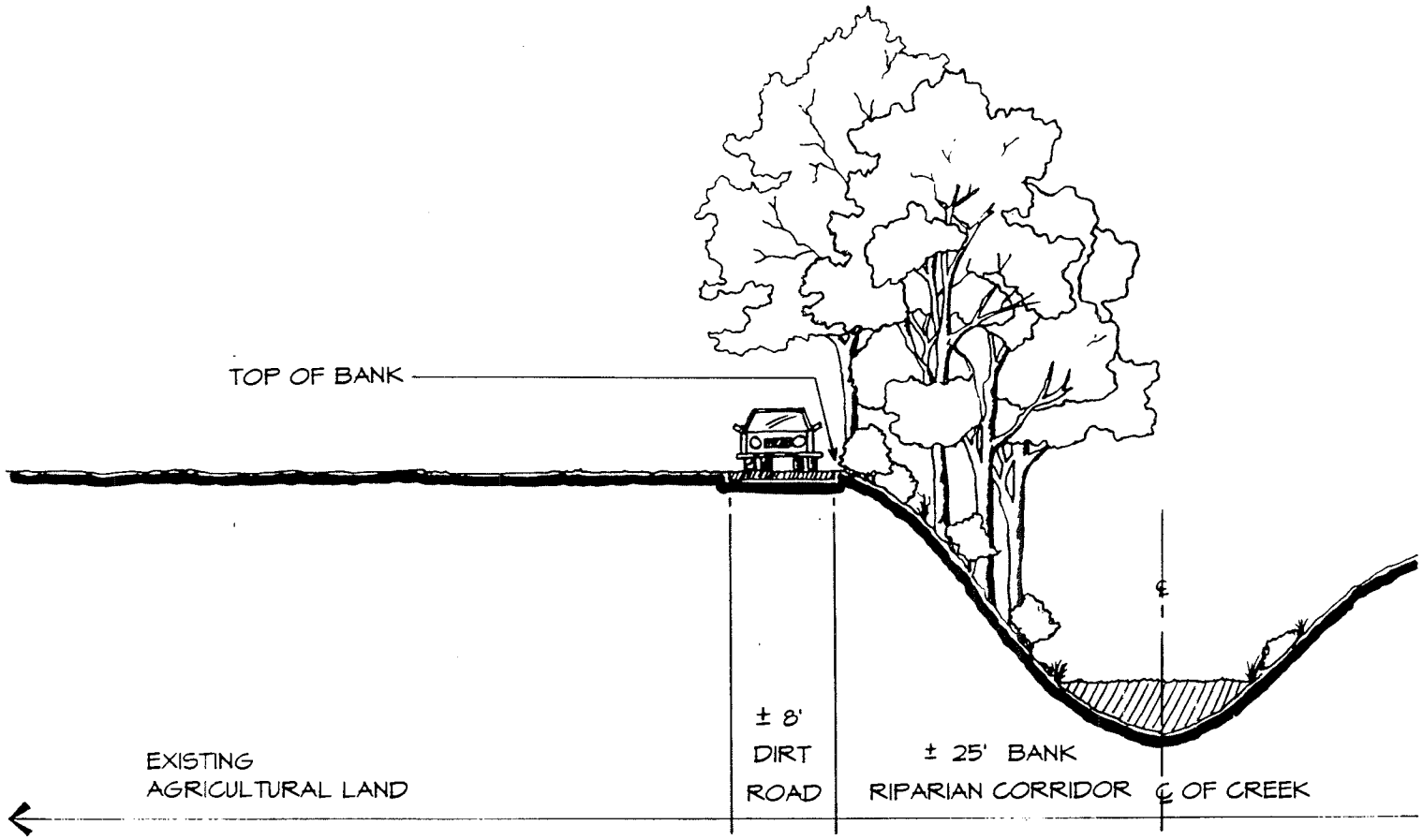
Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- 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;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (i.e., the City of Gilroy Consolidated Landscape Policy); and/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.

No Impact–Loss of Habitat. Amending the Urban Service Area and construction of the sports park facilities in the eastern portion of the project site will not result in the loss of any vegetation or wildlife habitat. Due to continuous human interaction, agricultural fields typically provide little habitat for wildlife and do not represent a significant biological resource. Since the continuation of existing agricultural operations in the Urban Service Area amendment area will not affect biological resources on the project site, and construction of the sports park facilities in the eastern portion of the project site will not substantially diminish plant or wildlife habitat, there is no significant impact and no mitigation is required.

Beneficial Impact–Riparian Buffer. The Uvas Creek trail will be located a minimum of 50 feet from the top of the Uvas Creek bank. Since the existing riparian corridor is approximately 25 feet wide (from creek centerline to edge of canopy) in most areas of the project site, and since riparian vegetation is absent in some areas along the creek, the proposed 50-foot habitat buffer will substantially increase the amount of native habitat and provide an adequate buffer. The 50-foot buffer will be planted with native grasses and native shrub and riparian understory vegetation, which will replace the existing dirt road along the edge of the existing riparian corridor, as well as a portion of the existing agricultural fields west of the proposed pedestrian trail. No buildings or other permanent development is proposed to be located near the buffer area. The provision of a 50-foot (minimum) habitat buffer is a beneficial impact.



Source:The BealsGroup

No Scale

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Current Conditions Along Uvas Creek

Figure 14

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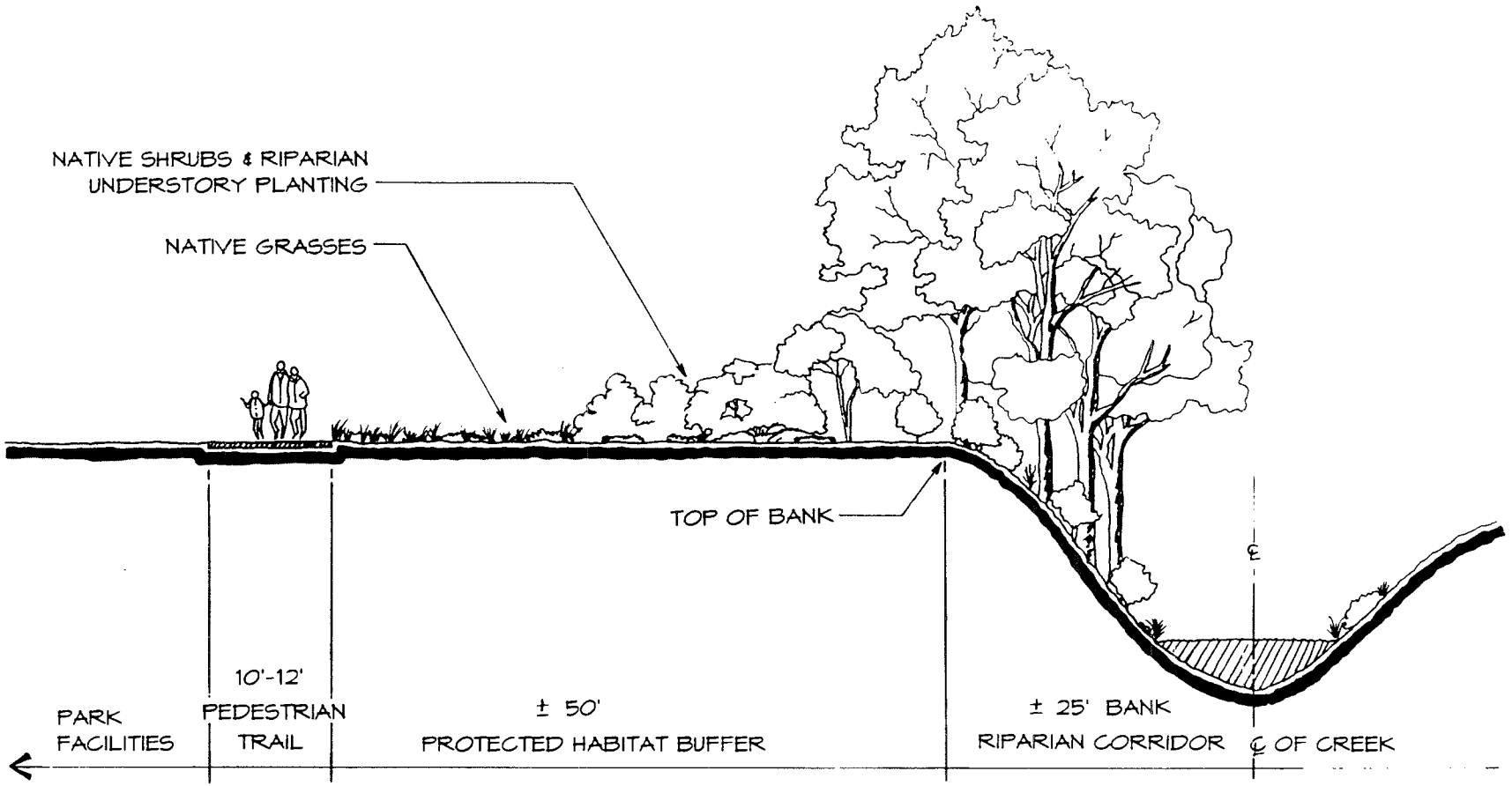

Source:The BealsGroup

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Proposed Conditions Along Uvas Creek

Figure 15

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Potentially Significant Impact–Invasive Plant Species. The existing riparian habitat along Uvas Creek, as well as the proposed expansion of the habitat buffer, are sensitive areas that could be affected by the presence of non-native, invasive plant species. Any deterioration of habitat quality caused by the introduction of non-native, invasive plant species into the riparian habitat and/or buffer would be a potentially significant impact. Implementation of the following mitigation measure will reduce this impact to a less than significant level.

Mitigation Measure

4. Project plans, subject to the review and approval of the City of Gilroy Planning Division, shall include a habitat buffer designed to include appropriate native plant species and shall not include plantings of non-native, invasive plant species. The currently unvegetated portion of the 50-foot (minimum) buffer area west of the trail shall be planted with locally-obtained native grass, shrub and riparian understory species. Wherever possible, the east side of the trail shall be planted with native grasses or other native species to provide additional native habitat before giving rise to the turf athletic fields.

Potentially Significant Impact–Loss of Significant Trees. The Uvas Creek trail along the north side of Thomas Road–Luchessa Avenue, along the north side of Mesa Road, and through the riparian habitat leading to and from the proposed pedestrian bridge passes through areas with trees. Some of the trees in these areas may be considered "significant" trees, as described in the *City of Gilroy Consolidated Landscaping Policy*. Although specific construction plans have not yet been prepared, tree removal may be necessary. Should the construction of the Uvas Creek trail require the removal of any significant trees, the loss of these trees could be a potentially significant impact.

In addition, grading or other construction activities in or adjacent to significant trees that are not proposed for removal could result in injury to the trees. Should the construction of the Uvas Creek trail result in inadvertent injury and/or death to any significant trees not proposed for removal, the loss of these trees would be a potentially significant impact.

Implementation of the following mitigation measures will reduce these potential impacts to a less than significant level.

Mitigation Measures

5. Prior to the removal of any significant tree(s), a field survey shall be conducted by a certified arborist to determine the number and location of each significant tree to be removed, the type and approximate size of each significant tree, and the reason for removal. These findings shall be included in a written report that contains specifications for replacing significant trees to

be removed. The written report shall be prepared prior to the commencement of grading activities that take place along the north side of Thomas Road–Luchessa Avenue, along the north side of Mesa Road, and through the riparian habitat leading to and from the proposed pedestrian bridge, subject to approval by the City of Gilroy Planning Division.

6. Prior to the commencement of construction activities, the protected zone (one to 1.5 times the distance from the trunk to the dripline, depending on the tree species) of any trees or groups of trees to be retained shall be fenced to prevent injury to the trees during construction. Soil compaction, parking of vehicles or heavy equipment, stockpiling of construction materials, and/or dumping of materials shall not be allowed within the protected zone. The fencing shall remain in place until all construction activities are complete. The trees or groups of trees to be fenced shall be indicated in a written report prepared subject to approval by the City of Gilroy Planning Division.

Significant Impact–Riparian Habitat. A portion of the Uvas Creek trail will pass through riparian woodland habitat leading to and from a pedestrian bridge over Uvas Creek. Riparian woodland habitat is protected by the CDFG. Removal of riparian woodland vegetation due to construction of the Uvas Creek trail would be a significant impact. Implementation of the following mitigation measure will reduce this impact to a less than significant level.

Mitigation Measure

7. Prior to commencement of trail construction activities the City of Gilroy Planning Division shall have a qualified biologist prepare a Habitat Mitigation Plan for approval by the City of Gilroy and the California Department of Fish and Game. The Habitat Mitigation Plan shall identify the exact amount and location of impacted and replacement habitat, and shall specify the use of locally-obtained native riparian species. Any loss of riparian woodland vegetation resulting from Uvas Creek trail construction activities shall be mitigated on-site within the 50-foot (minimum) habitat buffer at a minimum 3:1 replacement ratio.

Significant Impact–Riparian Habitat. A pedestrian bridge will be constructed over Uvas Creek to facilitate the extension of the Uvas Creek trail to Mesa Road and Gavilan Community College. Installation of the pedestrian bridge will involve construction work in the creek bed and/or banks to construct the bank abutments. This construction activity could introduce fill material into the creek and/or increase turbidity in the creek and interfere substantially with the movement of steelhead, which are known to occur in Uvas Creek, as well as other fish and aquatic wildlife species, resulting in a potentially significant impact. Implementation of the following mitigation measures will reduce this impact to a less than significant level.

Mitigation Measures

8. Prior to the commencement of bridge construction activities, a Section 1603 Streambed Alteration Agreement shall be obtained from the California Department of Fish and Game. Compliance with this mitigation measure may include, but not be limited to, the following:

   - Bridge construction work shall be initiated and completed during the summer and fall months when this portion of the creek is dry, or at least has a very low flow. Typically, no construction work shall be allowed in the creek between October 15 and early June.
   - From June to October 15, when construction is allowed, if any water is flowing in the creek, the flow shall be diverted into an open, gravel-lined bypass channel for the duration of the bridge construction work.

9. Prior to commencement of bridge construction activities the City shall contact the U.S. Army Corps of Engineers to determine who has jurisdiction over the bridge construction activities and if a permit is required for bridge construction.

10. Prior to commencement of construction activities, siltation fencing or hay bales shall be installed along portions of Uvas Creek within 100 feet of construction and/or staging areas, or other erosion control measures shall be implemented to prevent sediment from filling the creek, subject to approval by the City of Gilroy Engineering Division.

Potentially Significant Impact–Burrowing Owls. Potential burrowing owl habitat exists along the slope of the levee in the northwest corner of the project site. The Uvas Creek trail will be constructed along the top of the levee. Should active burrowing owl nests occur along the slope of the levee, any construction and site preparation activities within or immediately adjacent to nest habitat, if conducted during the nesting season, could result in the direct loss of nests, including eggs and young, or the abandonment of an active nest by the adults. Depending on the number and extent of burrowing owl nests on the site that may be disturbed or removed, the loss of active burrowing owl nests would be a potentially significant impact. Implementation of the following mitigation measures will reduce this impact to a less than significant level.

Mitigation Measures

11. Subject to the review of the City of Gilroy Planning Division, no earlier than 45 days and no later than 20 days prior to commencement of grading or construction on or adjacent to the slope of the levee, field surveys shall be conducted at least four consecutive evenings by a qualified biologist to determine if burrowing owls are present in the construction zone or within 250 feet of the construction zone. These surveys shall be required only if any construction would occur during the nesting and/or breeding season of burrowing owls potentially nesting in the area (February 1 through August

31) and/or during the winter residency period (December 1 and January 31). Pre-construction survey results shall be submitted to the California Department of Fish and Game for review and approval. If active nests are found in within the survey area, a burrowing owl habitat mitigation plan shall be submitted to the California Department of Fish and Game for review and approval. The burrowing owl habitat mitigation plan shall contain mitigation measures contained in the California Department of Fish and Game Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 1995). Compliance with this mitigation measure may include, but not be limited to, the following:

- Avoidance of occupied burrows during the nesting season (February 1 through August 31);
- Acquisition, protection and funding for long-term management and monitoring of foraging habitat adjacent to occupied habitat;
- Enhancement of existing burrows and/or creation of new burrows;
- Passive relocation of burrowing owls.

12. Prior to commencement of construction activities, the city shall arrange for a qualified biologist to inform workers of the potential presence of the all special-status species, their protected status, work boundaries, and measures to be implemented to avoid loss of these species during construction activities.

Potentially Significant Impact–Raptors. The riparian woodland habitat found along Uvas Creek contains potential nesting habitat for raptors, including white-tailed kite, northern harrier, Cooper's hawk, and short-eared owl, which are protected by the CDFG. Should active raptor nests occur in the area proposed for development (i.e., trail and bridge construction through the riparian corridor), any construction and site preparation activities within or immediately adjacent to nest habitat, if conducted during the nesting season, could result in the direct loss of nests, including eggs and young, or the abandonment of an active nest by the adults. Depending on the number and extent of raptor nests on the site that may be disturbed or removed, the loss of active raptor nests would be a potentially significant impact. Implementation of the mitigation measure presented above requiring a qualified biologist to inform construction workers of the potential presence of special-status species, and the following mitigation measure will reduce this impact to a less than significant level.

Mitigation Measure

13. Subject to the review of the City of Gilroy Planning Division, no earlier than 45 days and no later than 20 days prior to commencement of clearing, grading or construction in or adjacent to any riparian habitat, a field survey shall be conducted by a qualified biologist to determine if active raptor nests are present in the construction zone or within 250 feet of the construction zone.

These surveys shall be required only if any construction would occur during the nesting and/or breeding season of raptors potentially nesting in the areas proposed for development (generally March 1 through August 1). If active nests are found within the survey area, at the discretion of the biologist, clearing and construction within 250 feet shall be postponed or halted until the nests are vacated and juveniles have fledged and there is no evidence of a second attempt at nesting.

Potentially Significant Impact–Amphibians. The riparian woodland habitat found along Uvas Creek contains potential habitat for California red-legged frog, foothill yellow-legged frog, western spadefoot toad, California tiger salamander, and western pond turtle, which are protected by the USFWS and/or the CDFG. Should these species occur in the area proposed for development, any construction and site preparation activities within or immediately adjacent to the riparian woodland habitat, if conducted during the rainy season, could result in the direct loss of these species through injury or mortality from being crushed by construction equipment and materials, siltation and pollution of Uvas Creek, or consumption by predators attracted to the project site. Post-construction activities associated with uses at the sports park may result in incidental take of these species from being killed or harassed by pets and people, consumption by predators attracted to the project site, or killed or injured by contamination from use of chemical pesticides on turf areas. The loss of individuals of these protected species would be a potentially significant impact. Implementation of mitigation measures presented above, which require construction activities in or adjacent to Uvas Creek to occur when the creek is dry or has a very low flow (generally June through October 15), siltation fencing, hay bales or other erosion control measures to be installed along the portion of Uvas Creek occurring on the project site to prevent sediment from filling the creek, retention of a qualified biologist to inform construction workers of the potential presence of special-status species, and the following mitigation measures will reduce this impact to a less than significant level.

Mitigation Measures

14. Subject to the review of the City of Gilroy Planning Division, a qualified biologist shall monitor the project site during construction activities within 100 feet of Uvas Creek. If California red-legged frog, foothill yellow-legged frog, western spadefoot toad, California tiger salamander, and/or western pond turtle turtles are observed at the site, construction activities shall be halted and the USFWS shall be contacted for further assistance.

15. All food-related trash items shall be enclosed in sealed containers and regularly removed from the project area to deter attraction of potential predators of the California red-legged frog, foothill yellow-legged frog, western spadefoot toad, California tiger salamander, and western pond turtle. Pets shall not be allowed on the construction site. The proper location of the trash containers shall be subject to the review and approval of the City of Gilroy Community Development Department.

Potentially Significant Impact–Habitat Disturbance During Construction. Construction vehicles and staging areas located near the riparian woodland habitat could potentially result in accidental spills of contaminants or other harmful materials, such as diesel fuel or oil, that could spread into the sensitive riparian woodland habitat and Uvas Creek and lead to harm or death of potential special-status species occurring in those areas. In addition, during the operations of the sports park, contamination of Uvas Creek could potentially occur from pesticides, fertilizers, and similar substances that are applied to the sports park athletic fields. The degradation of the riparian woodland and/or Uvas Creek, and the resulting harm or loss of special-status species, occurring as a result of contamination during construction or post-construction activities would be a potentially significant impact. Implementation of mitigation measures presented in Section 2.3 Hydrology which require a NPDES permit and a SCVWD permit, and the following mitigation measures will reduce this impact to a less than significant level.

Mitigation Measures

16. Prior to the commencement of construction activities, a plan shall be prepared to allow a prompt and effective response to any accidental spills, and all workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur, subject to approval by the City of Gilroy Engineering Division. This plan shall specify that all staging areas and all fueling and maintenance of vehicles and other equipment shall occur at least 100 feet from the riparian habitat and Uvas Creek.

17. Prior to approval of construction plans, guidelines shall be established for the prevention of contamination of the creek by pesticides, herbicides, fungicides, and fertilizers from maintenance of the athletic fields, subject to the review and approval of the City of Gilroy Engineering Division. The guidelines shall include a requirement for oil/grease separators to be installed in on-site storm drain systems and sweeping programs to be implemented for parking lots.

Potentially Significant Impact–Habitat Disturbance During Recycled Water Line Construction. Construction activities on the Uvas Creek levee have the potential to produce erosion or accidental spills of contaminants or other harmful materials which could decrease habitat quality and interfere with the movement or well-being of special-status species potentially occurring in the riparian habitat. This would be a potentially significant impact. Implementation of mitigation measures presented above, which require siltation fencing, hay bales or other erosion control measures to be installed along the portion of Uvas Creek occurring on the project site to prevent sediment from filling the creek, and the preparation of a spill abatement and clean-up plan, would reduce this impact to a less than significant level.

Potentially Significant Impact–Effects of Nighttime Lighting on Wildlife. Nighttime lighting of the sports park play fields may occasionally occur when night-time games are scheduled. Although nighttime lighting is not expected to occur daily or to remain on all night, lighting provided for the sports park could spill over

into the riparian woodland habitat and could potentially disturb wildlife species occurring in the riparian habitat, restrict the movement or activity of wildlife species in the riparian habitat, or facilitate increased predation of wildlife species, which could potentially include special-status species. Restricted movement of wildlife species and increased predation of special-status species occurring as a result of increased levels of nighttime light would be a potentially significant impact. Implementation of the following mitigation measure will reduce this impact to a less than significant level.

Mitigation Measure

18. Prior to final project approval subject to the review and approval of the City of Gilroy Planning Division, a lighting plan for the sports park shall be developed. This lighting plan shall include at least the following elements:

    - All lighting in the western portion of the sports park will be directed away from the riparian habitat;
    - No lighting will be installed along the Uvas Creek Trail; and
    - No lighting will generally be allowed after 11:00 PM.

Potential Impact–Domestic Activities. People and unleashed pets wandering off of the Uvas Creek Trail could potentially restrict the movement or activity of and/or disturb or kill wildlife species in the riparian woodland habitat and Uvas Creek, which could potentially include special-status species. Restricted movement of wildlife species and disturbance or death of special-status species occurring as a result of increased human and domestic animal activity would be a potentially significant impact. Implementation of the following mitigation measure will reduce this impact to a less than significant level.

Mitigation Measure

19. Prior to final project approval, a signage plan for the sports park shall be prepared to outline the language, number and location of signs to dissuade people from straying off the Uvas Creek Trail and to prohibit unleashed dogs on the Uvas Creek trail, subject to approval by the City of Gilroy Planning Division.

2.6 Transportation/Circulation

Environmental Setting

A transportation impact analysis was prepared by Fehr and Peers Associates, Inc. in December 1998. That report is included in the Technical Composite, available for

review at the City of Gilroy Community Development Department. The report specifically addresses transportation impacts of the proposed sports park. The following discussion is based on that report. No specific development plans exist for the remaining parcels on the project site. At this time those parcels are expected to remain in agricultural use.

Regional Transportation Setting

Figure 16 shows the existing transportation network in the project vicinity.

Roadway Network. U.S. Highway 101 and State Highway 152 provide regional access to the project site. Local access is provided by Monterey Street (or Road), Monterey Frontage Road, Thomas Road–Luchessa Avenue and Princevalle Street.

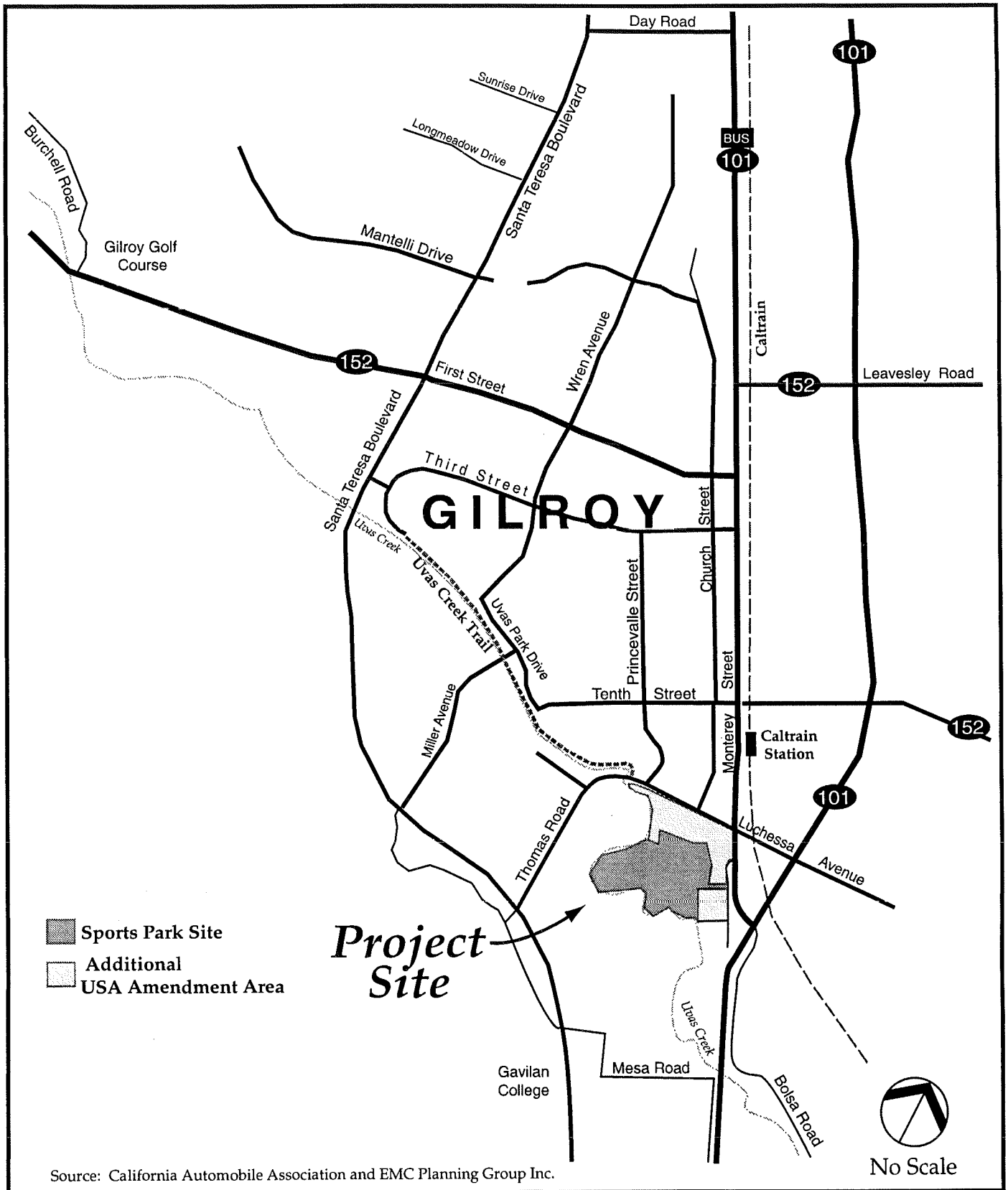
U.S. Highway101 transitions from a four-lane freeway (to the south) to a six-lane freeway (to the north) in the vicinity of the project site. South of Monterey Street, U.S. Highway 101 becomes a four-lane highway, and north of Cochrane Road, it is a four-lane freeway. U.S. Highway 101 extends northward to San Jose, San Francisco and beyond and southward to Salinas and beyond. Access to and from the project site is provided via the U.S. 101 interchange at Monterey Street.

Monterey Street is generally a four-lane arterial through the City of Gilroy. Through downtown Gilroy (between Third Street and Seventh Street), Monterey Street narrows to two travel lanes, with angled parking on the east side of the street and a raised median. North of the city limits, Monterey Street is a rural highway with four travel lanes and a center turn lane. Monterey Street continues northward into San Jose. South of its interchange with U.S. 101, Monterey Street becomes Bolsa Road. Near the project site, the speed limit on Monterey Street is 50 miles per hour. (Monterey Street is officially Monterey Road in places; for simplicity's sake, this EIR uses Monterey Street throughout).

Monterey Frontage Road is a two-lane road that extends southward from Monterey Street ending in a cul-de-sac south of the project site. Monterey Frontage Road provides direct access to the project site (and other properties).

Thomas Road–Luchessa Avenue is a two-lane roadway, which extends northward from Santa Teresa Boulevard to Uvas Creek and then continues eastward. The City of Gilroy is currently in the process of changing the name of this roadway. The north/south segment between Santa Teresa Boulevard and Luchessa Avenue (where the road curves to the east) will remain Thomas Road. The segment from the curve to Monterey Street will be renamed Luchessa Avenue. The roadway segment east of Monterey Street is currently named Luchessa Avenue. Near the project site, the speed limit on this arterial roadway is 40 mph.

Princevalle Street is a two-lane residential collector street that extends northward from Luchessa Avenue to First Street.



Source: California Automobile Association and EMC Planning Group Inc.

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Existing Transportation Network

Figure 16

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Transit Service. The Santa Clara Valley Transportation Authority (VTA) operates public transit service in Santa Clara County. Bus route 68 operates along Princevalle Street, north of Luchessa Avenue–Thomas Road and along Thomas Road, west of Princevalle Street. Route 68 provides service between San Jose Diridon Station and Gavilan Community College in Gilroy. Hours of operation are 4:30 AM to 1:00 AM on weekdays and 6:00 AM to 12:30 AM on weekends. Route 68 operates on a 15-minute headway during the commute hours and a 30- to 60-minute headway during other hours.

Commuter rail service (CalTrain) is provided from Gilroy to San Francisco by the Joint Powers Board. CalTrain provides frequent train service between San Jose and San Francisco seven days a week. Extended service is provided to Morgan Hill and Gilroy during the weekday commute hours only. The Gilroy CalTrain station is located east of Monterey Street between Seventh and Ninth Streets, approximately 1.5 miles from the proposed sports park.

Pedestrian and Bicycle Facilities. Pedestrian facilities include sidewalks, crosswalks, and pedestrian signals. There are no pedestrian facilities near the project site. A sidewalk is provided along the north side of Thomas Road–Luchessa Avenue between Monterey Street and Princevalle Street to the north of the project site. Sidewalks are not provided along Monterey Frontage Road or Monterey Street.

Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths are paved trails that are separated from the roadway. Bike lanes are lanes on roadways that are designated for use by bicycles by striping. Bike routes are roadways that are designated for bicycle use with signs only. Currently, no bicycle facilities directly serve the project site. There is a bike path along the eastern side of Uvas Creek between Thomas Road–Luchessa Avenue and Westwood Avenue, north of the site. Bike lanes are designated on Princevalle Street from several blocks north of Thomas Road–Luchessa Avenue to Sixth Street.

Existing Traffic Volumes, Lane Configurations and Level of Service

There are currently four rural residences, agricultural lands and one commercial use located on the project site. Traffic generation from these uses is very low. The Uvas Creek Trail is currently an unpaved service road and farm road. Traffic on this road is minimal. Very little traffic is generated by existing uses on the project site.

The transportation impact analysis identified the intersections of Monterey Street and Monterey Frontage Road, Thomas Road–Luchessa Avenue and Church Street and Thomas Road–Luchessa Avenue and Princevalle Street as key intersections for analysis. The operation of these intersections was evaluated for weekday evening (PM) and Saturday peak traffic conditions. The weekday PM peak conditions generally occur during the evening commute hours between 4:00 PM to 6:00 PM, Monday through Friday. The Saturday peak conditions generally occur between 1:00 PM and 3:00 PM. Intersection operations were evaluated for one hour during this period. Manual turning movement counts were conducted at the study

intersections on Saturday, October 24, Wednesday, December 16 and Saturday December 19, 1998 to obtain peak hour volumes. Additional weekday PM peak hour traffic counts were conducted by the City of Gilroy in 1998.

Figure 17 shows the existing weekday PM and Saturday peak hour turning movement volumes at the key intersections. The intersection lane configurations are presented in Figure 18.

Level of Service (LOS) is a qualitative description of an intersection's operation, ranging from LOS A, or free-flow conditions, to LOS F, or over-saturated conditions. The City of Gilroy's standard for unsignalized intersections, as well as signalized intersections and roadway segments is LOS C.

Intersection levels of service were calculated for key intersections using the methodology presented in Chapter 10 of the *1994 Highway Capacity Manual* for two-way stop-controlled intersections. This methodology evaluates an intersection's operation based on the total average delay at an intersection. The total delay for the unsignalized intersections was calculated using TRAFFIX analysis software and then correlated to a level of service. The level of service thresholds for two-way stop-controlled intersections are presented in Table 4.

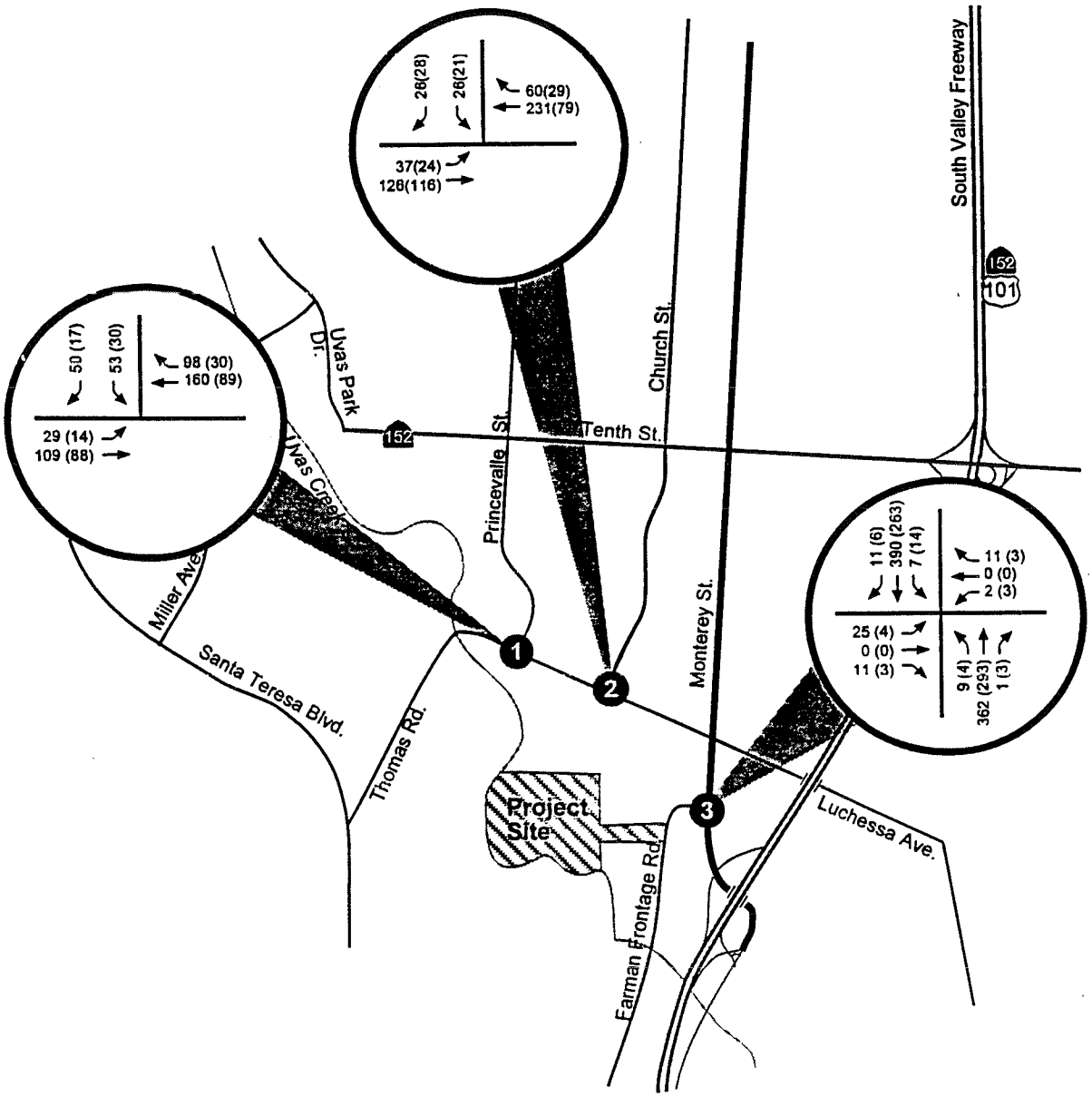
TABLE 4

Two-Way Stop-Controlled Intersection Level of Service Definitions Using Average Total Vehicular Delay

Level of Service	Average Total Delay Per Vehicle (Seconds)
A	≤ 5.0
B	5.1 to 10.0
C	10.1 to 20.0
D	20.1 to 30.0
E	30.1 to 45.0
F	> 45.0

Source: Transportation Research Board, *Highway Capacity Manual*, Special Report 209, 1994

Current operations of the key intersections are presented in Table 5. The results of the LOS calculations indicate that the key intersections are operating at a good level of service currently. Overall intersection operations at the intersections are at LOS A during the weekday PM and Saturday peak hours.



Key:

1 = Study Intersection

00 (00) = PM (Saturday)

No Scale

Source: Fehr and Peers Associates Inc.

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Existing Weekday PM and Saturday Peak Traffic Volumes

Figure 17

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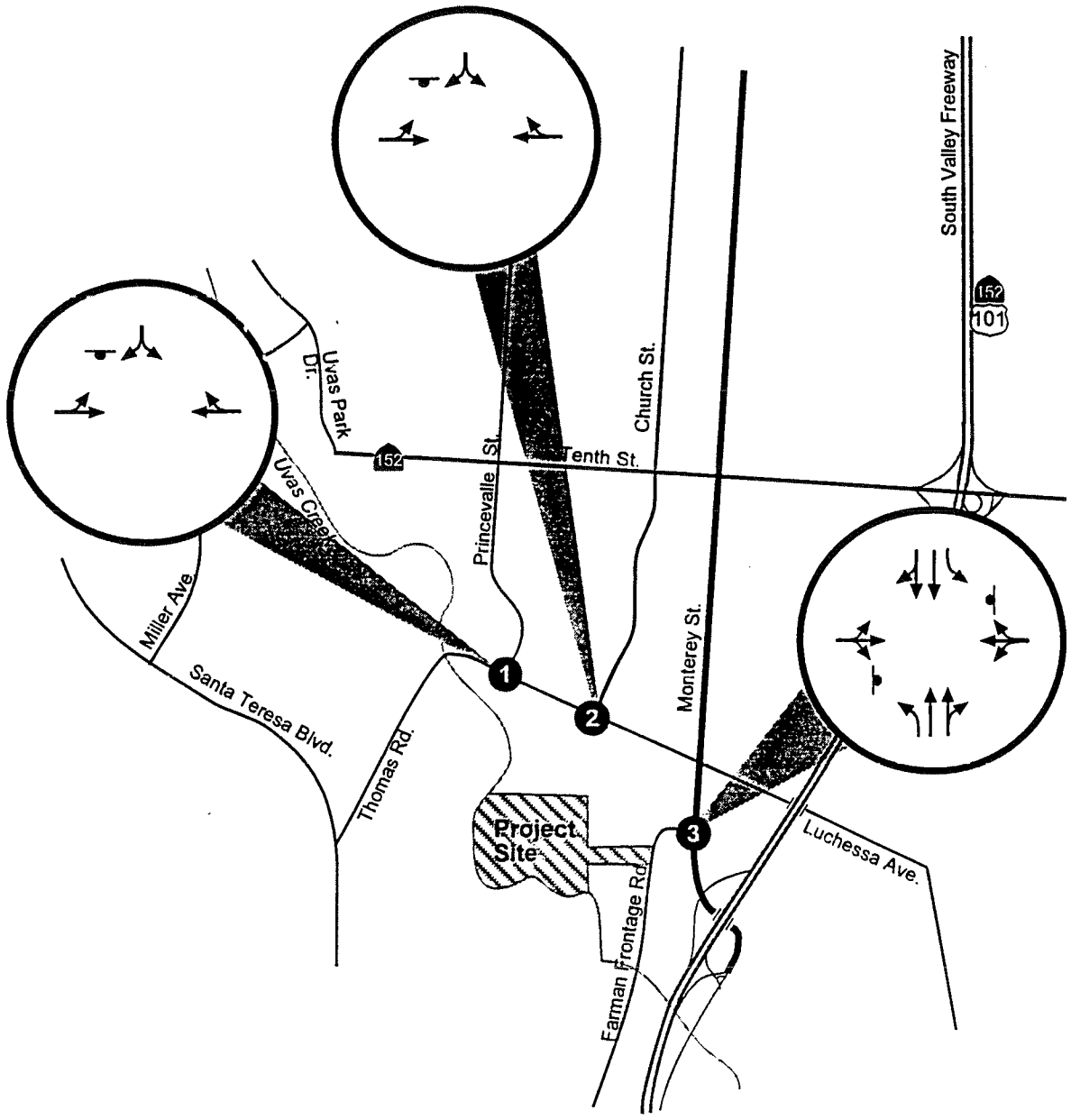

Source: Fehr and Peers Associates Inc.

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Existing Intersection Lane Configurations

Figure 18

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TABLE 5

Existing Intersection Levels of Service

Intersection	Weekday PM Peak		Saturday Peak	
	Average Delay	LOS	Average Delay	LOS
Monterey Street and Monterey Frontage Road	0.6	A	0.2	A
Thomas Road–Luchessa Avenue and Princevalle Street	1.2	A	0.9	A
Thomas Road–Luchessa Avenue and Church Street	0.8	A	0.9	A

Average total intersection delay for unsignalized intersections expressed in seconds per vehicle.
LOS calculations were performed using TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections

Source: Fehr and Peers Associates, Inc.

TABLE 6

Approved Developments in the Vicinity of the Project Site

Development	Location	Use and Size
Motel 6	East of Monterey Street; west of U.S. Highway 101	129 rooms (replacing 56 rooms)
Truck Stop	East of Monterey Street; east of U.S. Highway 101	Overnight truck stop, gas station, convenience market, fast food restaurant, motel, and mini storage
Eagle Ridge	West of Santa Teresa Boulevard, between Third Street and Miller Avenue	650 single-family and townhouse units, 18-hole golf-course
The Villas	West end of Oakbrook Drive, west of Thomas Road	75 single-family residential units
The Uplands	West of Thomas Road; north of Luchessa Avenue	60 single-family residential units

Source: Fehr and Peers Associates, Inc. and City of Gilroy

The weekday PM peak hour trip information for these projects was obtained from the traffic analysis reports prepared for each development. Traffic associated with

these developments during the Saturday peak hour was estimated using trip generation rates in the Institute of Transportation Engineers *Trip Generation* (6th Edition) and the trip distribution information provided by the City of Gilroy. The traffic associated with the approved developments was added to the existing volumes at the key intersections to estimate traffic volumes for background conditions. Figure 19 illustrates the traffic volumes estimated at the key intersections for background conditions.

Background Intersection Level of Service

The results of the level of service calculations for background conditions are presented in Table 7. The key intersections will continue to operate at LOS A with the addition of traffic associated with already approved developments.

TABLE 7

Background Intersection Levels of Service

Intersection	Weekday PM Peak		Saturday Peak	
	Average Delay (seconds)	LOS	Average Delay (seconds)	LOS
Monterey Street and Monterey Frontage Road	0.8	A	0.5	A
Thomas Road–Luchessa Avenue and Princevalle Street	1.2	A	0.8	A
Thomas Road–Luchessa Avenue and Church Street	0.8	A	0.8	A

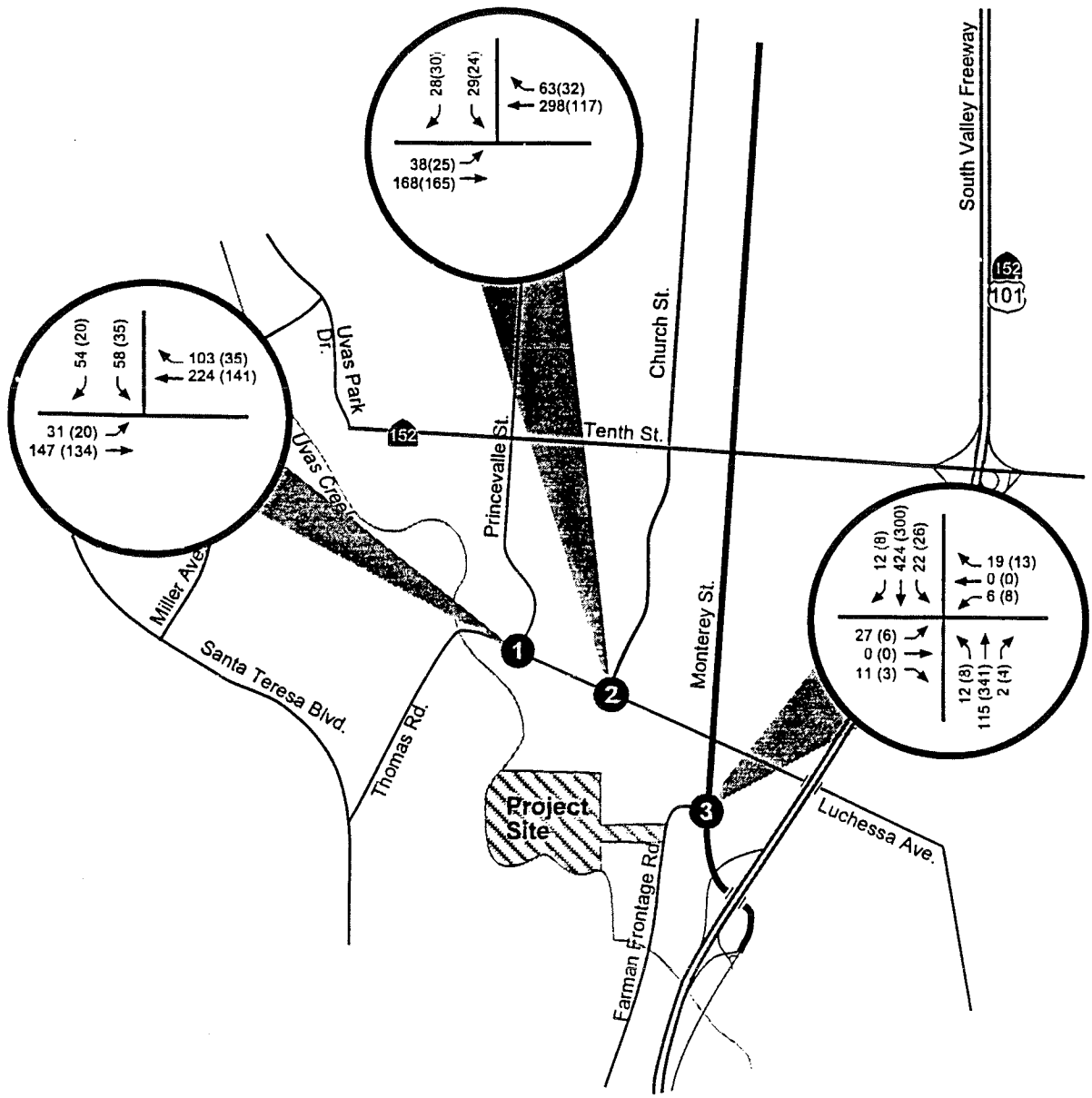
The average total intersection delay is expressed in seconds per vehicle.

LOS calculations were performed using the CMP level of service analysis program, TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections.

Source: Fehr and Peers Associates, Inc.

Project Analysis

The transportation impact analysis specifically addresses transportation impacts of the proposed sports park. Additional traffic studies would be required when future development occurs on the remaining parcels within the project site. The potential transportation impacts of the proposed sports park and related on-site and off-site improvements are discussed below.



Key:

1 = Study Intersection

00 (00) = PM (Saturday)

No Scale

Source: Fehr and Peers Associates Inc.

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Background Traffic Volumes

Figure 19

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Sports Park-Related Traffic

The amount of traffic associated with the proposed sports park was estimated using a three-step process: trip generation; trip distribution; and trip assignment. In the first step, the projected traffic volumes that would enter and exit the sports park site were estimated for the PM peak and Saturday peak periods. In the second step, the general directions the trips would approach from or depart to were estimated. The trips were assigned to specific street segments and intersection turning movements in the third step.

Sports Park Trip Generation. Peak hour trip generation was estimated based on the proposed number and types of playing fields and other uses, as well as input from the project architect on the expected operation of the sports park. The trip generation estimates assumed the use of all softball/baseball fields at one time. The softball/baseball fields overlay the soccer fields, so both would not be in use at the same time. Basing the trip generation on the use of all softball/baseball fields was more conservative than assuming the use of all soccer fields. Soccer teams are likely to have slightly fewer players than softball/baseball teams (12 players per soccer team compared to 15 to 18 per softball/baseball team) and there are fewer proposed soccer fields than softball/baseball fields (seven soccer fields compared to 13 softball/baseball fields).

Trip generation estimates were developed for the weekday PM peak and Saturday peak periods. Estimates were made based on the following assumptions:

- 30 players per field for softball and Little League and 36 players per field for Colt baseball;
- One spectator per player for softball and colt baseball and 35 spectators per Little League game. (This represents slightly more than one spectator per player to reflect more parents watching their children);
- Automobile occupancy rate of 2.0 persons per vehicle for softball and Colt baseball and 2.1 persons per vehicle for Little League. (The higher occupancy for Little League reflects more parents arriving with children);
- 75 percent of the games beginning or ending during the peak hour, with the players and spectators associated with these games arriving or leaving during that hour;
- Commercial recreation, general park use, and special events would add 200 trips (half inbound and half outbound) during the Saturday peak hour; and
- Weekday PM peak hour trip generation would be 75 percent of the Saturday peak hour trip generation for softball and baseball games and 50 percent of Saturday peak hour trip generation for general park use, commercial recreation and special events.

Given these assumptions, the proposed project would generate approximately 550 weekday PM peak hour trips (275 inbound and 275 outbound) and 800 Saturday peak hour trips (400 inbound and 400 outbound). The trip generation estimates are presented in Table 8 by phase.

TABLE 8

Trip Generation Estimates

Phase	Uses	Weekday PM Peak Hour Trips (In plus Out)	Saturday Peak Hour Trips (In plus Out)
I	Access Road	0	0
II	1 Colt Baseball Field and 2 Little League Fields	112	148
III	1 Softball Field and Commercial Recreation	68	116
IV	4 Softball Fields	156	220
V	4 Softball Fields	156	220
VI & VII	1 Softball Field and General Park Development	58	96
VIII & XI	Roadway Improvements and South Uvas Creek Trail Extension	0	0

Project build-out is expected to occur over a 20-year period.

Source: Fehr and Peers Associates, Inc.

Sports Park Trip Distribution. The trip distribution pattern for the sports park was estimated based on existing travel patterns in the vicinity of the site and the relative locations of complementary land uses in the area. The major directions for project-generated traffic to approach and depart the project site are estimated to be:

30 percent to and from the west on Thomas Road–Luchessa Avenue;

10 percent to and from the north on Princevalle Street;

15 percent to and from the north on Church Street;

10 percent to and from the north Monterey Street;

20 percent to and from the north on U.S. Highway 101;

10 percent to and from the south U.S. Highway 101; and

5 percent to and from the neighborhoods north of Thomas Road–Luchessa Avenue, west of Monterey Street.

This trip distribution pattern is illustrated in Figure 20.

Sports Park Trip Assignment. The trips generated by the proposed sports park were assigned to the roadway system based on the directions of approach and departure discussed above. Figure 21 presents the peak hour project trip assignments by turning movement at the study intersections and on nearby roadway segments for build-out conditions. The projected sports park trips for each phase were added to the traffic volumes for Background Conditions to achieve turning-movement volumes at the key intersections for each phase of the project. The total traffic volumes under "with project" conditions are shown in Figure 22.

Background Plus Sports Park Intersection Levels of Service

Intersection level of service calculations were conducted to evaluate the operating conditions of the key intersections with project traffic added to background traffic to determine the potential impacts of the proposed sports park on the local roadway system. The intersection operations were evaluated for the completion of each phase of the sports park. The results of the intersection level of service calculations for background plus sports park conditions are summarized in Table 9.

Operations at the Monterey Street/Monterey Frontage Road intersection are projected to be acceptable (LOS C or better) during both peak hours through the completion of Phase IV. With the completion of Phase V, overall intersection operations are projected to deteriorate to LOS D during the weekday PM peak hour and LOS F during the Saturday peak hour. With the completion of Phases VI and VII, intersection operations during both peak hours are projected to be LOS F.

Both of the Thomas Road–Luchessa Avenue intersections are projected to remain at LOS A through all phases of sports park development.

U.S. Highway 101 Segment Level of Service

According to Congestion Management Plan 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. The segment of U.S. Highway 101 south of Monterey Street is not a freeway (it is a four-lane divided highway); however, no methodology is identified in the Congestion Management Plan guidelines for highways, so the freeway methodology was applied.

TABLE 9

Background Plus Sports Park Intersection Levels of Service

Monterey Street and Monterey Frontage Road				
At Completion of Project Phase	Weekday PM Peak		Saturday Peak	
	Average Delay (seconds)	LOS	Average Delay (seconds)	LOS
Background	0.8	A	0.5	A
Phase I & II	1.7	A	1.4	A
Phase III	2.5	A	2.3	A
Phase IV	6.0	B	6.1	B
Phase V	28.4	D	45.6	F
Phase VI & VII	60.0	F	117.1	F

Thomas Road–Luchessa Avenue and Princevalle Street				
At Completion of Project Phase	Weekday PM Peak		Saturday Peak	
	Average Delay (seconds)	LOS	Average Delay (seconds)	LOS
Background	1.2	A	0.8	A
Phase I & II	1.3	A	0.9	A
Phase III	1.9	A	1.0	A
Phase IV	1.4	A	1.1	A
Phase V	1.6	A	1.2	A
Phase VI & VII	1.6	A	1.3	A

Thomas Road–Luchessa Avenue and Church Street				
At Completion of Project Phase	Weekday PM Peak		Saturday Peak	
	Average Delay (seconds)	LOS	Average Delay (seconds)	LOS
Background	0.8	A	0.8	A
Phase I & II	0.9	A	0.9	A
Phase III	1.0	A	1.0	A
Phase IV	1.2	A	1.2	A
Phase V	1.4	A	1.5	A
Phase VI & VII	1.5	A	1.6	A

Phase I does not include trip generating uses. Phase I operations would be the same as Background.

Phase VI & VII is equal to project build-out conditions. Phases VIII and IX do not generate additional traffic.

The average total intersection delay is expressed in seconds per vehicle.

LOS calculations were performed using the CMP level of service analysis program, TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections.

Source: Fehr and Peers Associates, Inc.

Segments of U.S. Highway 101 were reviewed to determine if a significant amount of sports park traffic would be added to these segments during the weekday PM peak hour. Capacities of 2,200 vehicles per hour per lane (vphpl) for four-lane segments and 2,300 vphpl for freeway segments with six or more lanes were used in the analysis. Table 10 presents the capacities of each segment, the estimated number of trips added to each segment by the proposed development during the PM peak hour, and whether or not the freeway segment must be evaluated in greater detail. None of the U.S. Highway 101 segments required further analysis.

TABLE 10

Background Plus Sports Park Freeway Segment Analysis (Weekday PM Peak Hour)

Segment	Capacity	1% of Capacity	Project Trips	Requires Analysis?
Northbound U.S. Highway 101, Tenth Street to Monterey Street	6,900	69	55	No
Southbound U.S. Highway 101, Tenth Street to Monterey Street	6,900	69	55	No
Northbound U.S. Highway 101, Monterey Street to Castro Valley Road	4,400	44	28	No
Southbound U.S. Highway 101, Monterey Street to Castro Valley Road	4,400	44	28	No

A capacity of 2,200 vehicles per hour per lane was used for four-lane highway segments and a capacity of 2,300 vehicles per hour per lane was used for freeway segments with six or more lanes.

Source: Fehr and Peers Associates, Inc.

Monterey Street/Monterey Frontage Road Pedestrian Improvements

Proposed Facilities. As part of the proposed sports park development, six-foot wide sidewalks would be constructed along the west side of Monterey Frontage Road between Monterey Street and the park entrance and ten-foot sidewalks would be constructed along the west side of Monterey Street between Thomas Road–Luchessa Avenue and Monterey Frontage Road. Crosswalks are proposed across the north leg of the Monterey Street/Monterey Frontage Road intersection and the entire Thomas Road–Luchessa Avenue /Monterey Street intersection. A pedestrian island is proposed in conjunction with the crosswalk at Thomas Road–Luchessa Avenue and Monterey Street.

Analysis. It is recommended that the crosswalk across Monterey Street at Monterey Frontage Road not be provided until traffic signal installation occurs at this intersection. The high travel speeds on Monterey Street (in excess of 50 mph) and the 120-foot width of the street make it hazardous for pedestrians to cross without the protection of a traffic signal.

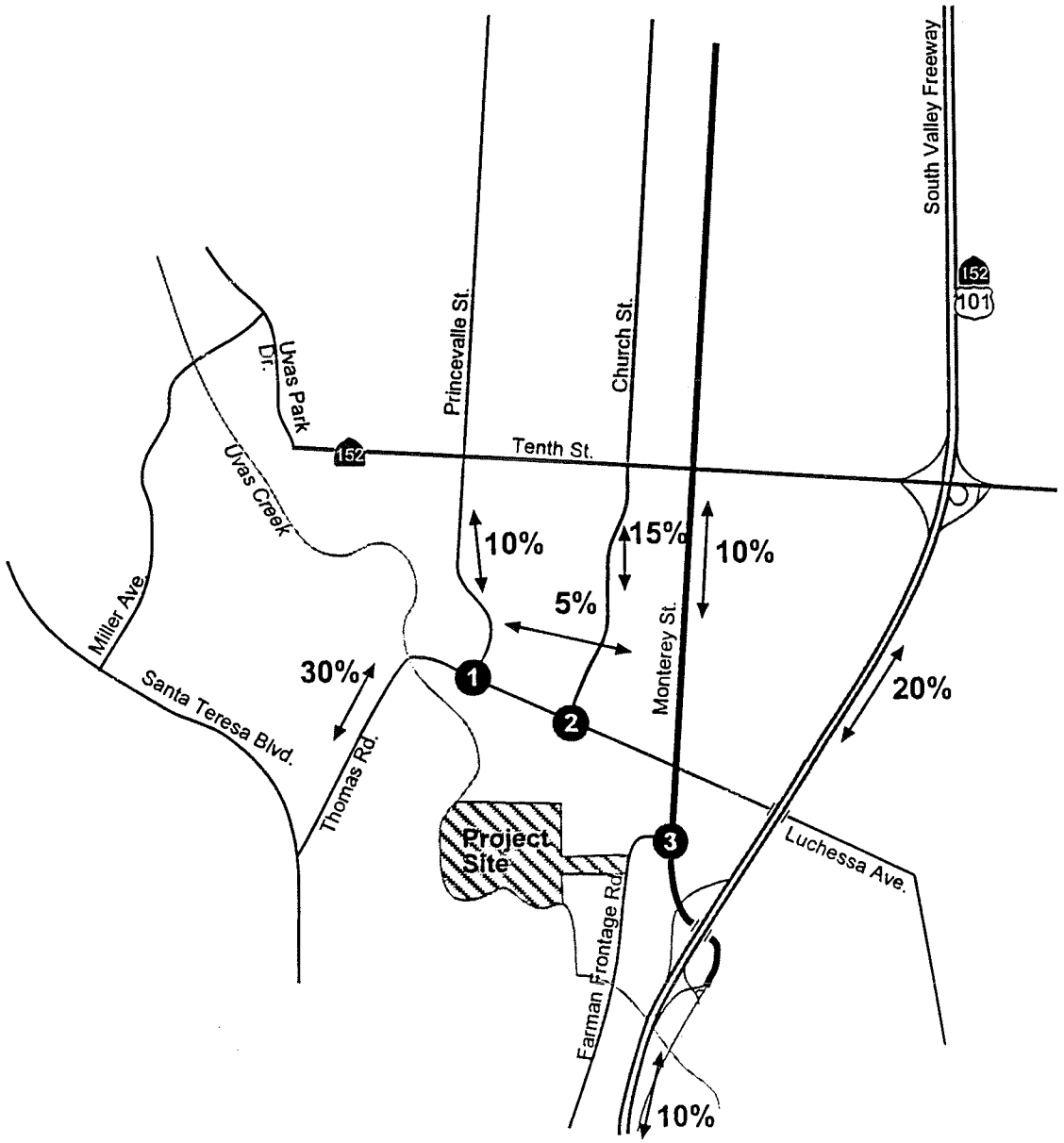
The City of Gilroy plans to install a traffic signal, including crosswalks and pedestrian signals, at the intersection of Thomas Road–Luchessa Avenue and Monterey Street in Spring 1999. Proposed project improvements along Monterey Street should be coordinated with the city's planned improvements.

Uvas Creek Trail

Proposed Facilities. The project proposes to extend the Uvas Creek Trail from Thomas Road–Luchessa Avenue through the sports park and then southward to Gavilan College. The proposed trail crossing of Thomas Road–Luchessa Avenue in the near-term is at the intersection of Thomas Road–Luchessa Avenue with Princevalle Street. A future under-crossing at the Uvas Creek bridge located west of Princevalle Street is planned but not a part of the proposed project.

The proposed near-term crossing at Princevalle Street would include construction of a separated paved trail along the north side of Thomas Road–Luchessa Avenue between the existing trail and Princevalle Street. The trail would then cross to the south side of Thomas Road–Luchessa Avenue. The trail would then follow along the south side of Thomas Road–Luchessa Avenue to the point where the existing levee top road meets Thomas Road–Luchessa Avenue. From there the trail would follow the levee top until it reaches the sports park site.

Analysis. The extension of the Uvas Creek Trail will allow pedestrians and bicyclists to access the site from Thomas Road–Luchessa Avenue and the neighborhoods to the north. The proposed temporary alignment will require a pedestrian and bicycle crossing of Thomas Road–Luchessa Avenue at Princevalle Street. This T-intersection is controlled by a stop sign on the southbound Princevalle Street approach. This intersection is operating at acceptable levels of service currently and is projected to continue to operate at acceptable levels with build-out of the proposed sports park. Under build-out conditions, this intersection will not warrant a traffic signal. As land is developed in the area, traffic volumes along Thomas Road–Luchessa Avenue will increase and a signal may be warranted.



Source: Fehr and Peers Associates Inc.

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Gilroy Sports Park and USA Amendment EIR

Trip Distribution Patterns

Figure 20

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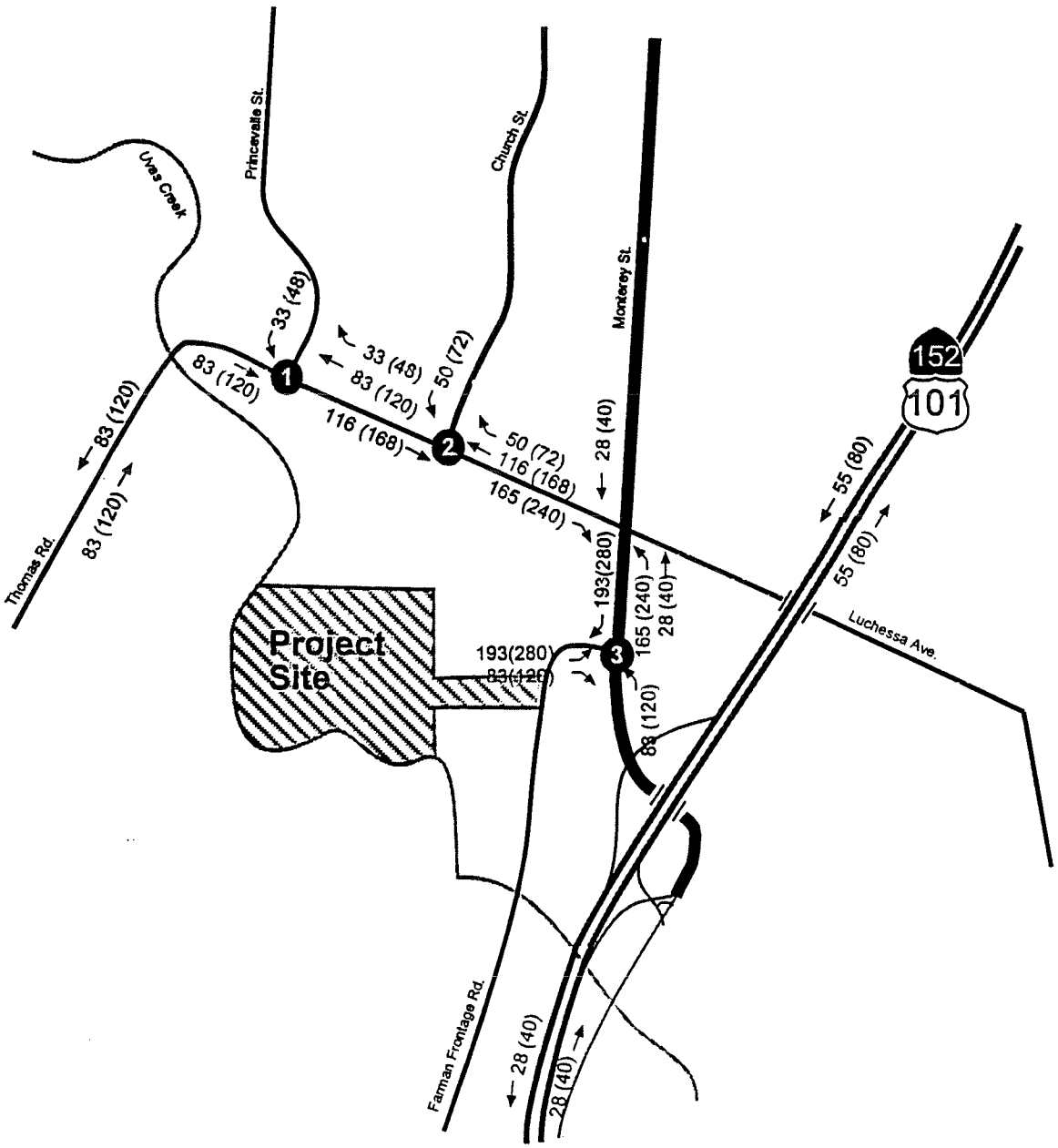

Source: Fehr and Peers Associates Inc.

No Scale

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Peak Hour Project-Related Trips

Figure 21

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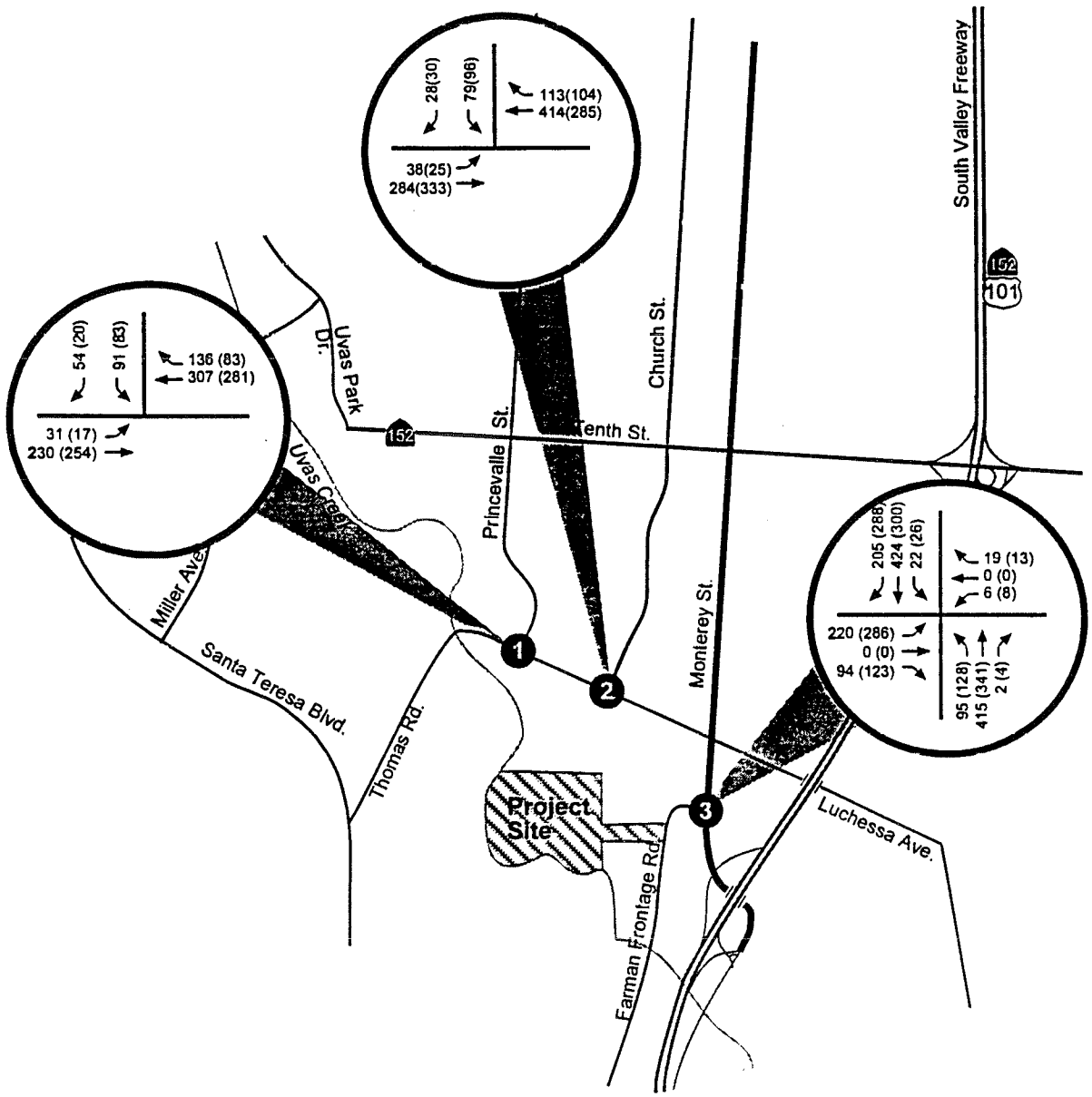

Source: Fehr and Peers Associates Inc.

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Project Conditions Traffic Volumes

Figure 22

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This temporary alignment would result in a detour of approximately 350 feet on the south side of Thomas Road–Luchessa Avenue. It is probable that rather than follow this route over the extra distance, that pedestrians and bicyclists would cross either cross Thomas Road–Luchessa Avenue directly at the point where the trail first meets Thomas Road–Luchessa Avenue, or cut up or down the levee embankment at the Princevalle Street intersection.

Due to travel speeds in excess of 40 miles per hour along Thomas Road–Luchessa Avenue, a crosswalk is not recommended without a pedestrian signal or all-way stop controls. According to Caltrans' "Warrant 3 - Minimum Pedestrian Volume" a signal is considered necessary if pedestrian volume in the crossing reaches a level of 100 or more for each of any four hours or 190 or more during any one hour during an average day. Data provided in the *Santa Clara County Countywide Trails Master Plan* (July 1995) indicates that usage of the Uvas Creek Trail (measured at Miller Avenue) was about 260 persons on a Saturday and 150 persons on a Tuesday in May 1994. While these use volumes do not warrant a pedestrian crossing, this street crossing will be utilized in the near-term as a connection for the Uvas Creek Trail and is expected to receive considerable use by bicyclists and pedestrians accessing the sports park.

Transit Improvements

Proposed Facilities. The sports park site plan shows a bus stop and turn around area on Monterey Frontage Road south of the project entrance. City staff has indicated that the VTA will extend service when other development in this area (including hotels and other commercial development along Monterey Street) generate sufficient demand for bus service.

Analysis. This bus stop and turn around should be designed to VTA standards. Pedestrian access should be provided from the bus stop to the park, including a sidewalk along Monterey Frontage Road that connects to the internal pedestrian paths. It would be preferable that the bus stop location be on the same side of Monterey Frontage Road as the proposed sports park, to reduce potential conflicts between pedestrians crossing the street and automobiles entering or exiting the sports park, and to provide the most convenient transit access. The proposed bus stop location is on the opposite side of Monterey Frontage Road from the sports park site, though it is located beyond the sports park driveway and conflicts between crossing pedestrians and automobiles should be minimal.

Site Access, On-Site Circulation, and Parking

Site Access. The Gilroy Sports Park will be served by one driveway on Monterey Frontage Road. The intersection of the driveway with Monterey Frontage Road will be controlled by a stop sign on the driveway approach (exiting the sports park). During the worst case peak hour on a Saturday, 400 vehicles are projected to exit the

site during one hour. Due to the low volumes along Monterey Frontage Road (currently 17 vehicles during the Saturday peak hour and 56 vehicles during the weekday PM peak hour), the intersection of the access road with Monterey Frontage Road is projected to operate at LOS A.

Entry to the park will be controlled by a cashier at the entry building located approximately 500 feet from the intersection of the access road with Monterey Frontage Road. A flat parking fee would be charged to vehicles entering the park with some park users, such as tournament players and members of league teams, using passes provided in advance. The hourly design capacity for a parking entrance with a cashier and a flat fee is approximately 300 vphpl. The project proposes to have two entry lanes. The highest inbound volume to the park is expected to occur during the Saturday peak hour. The estimated hourly peak volume is 400 vehicles. The 95th percentile queue was calculated using a Poisson distribution, a capacity of 300 vphpl, two entry lanes, and a peak volume of 400 vph. The maximum queue would be approximately 175 feet in each of two lanes. The 500-foot storage length would be sufficient to serve this queue.

Two turn-around areas are provided along the entry road: one between the park gates and Monterey Frontage Road and a second west of the entry building. These turn-around areas will allow vehicles arriving after the park has closed (or wishing to exit for other reasons) to make U-turns and exit the park.

On-Site Circulation. On-site circulation was reviewed and generally found to be adequate. Pedestrian paths and sidewalks are located throughout the park and provide adequate internal pedestrian circulation and connections to the Uvas Creek Trail and Monterey Frontage Road. Pedestrian paths along the perimeter of the park are 12 feet wide and double as emergency access roadways.

Parking. The parking demand was estimated in a manner similar to trip generation, based on the planned operation of the sports park and assumptions regarding numbers of persons per vehicle for the different uses within the park. The parking demand after build-out of the park is estimated to be 996 parked vehicles.

The recommended parking supply is the parking demand plus five percent to account for circulating vehicles. Therefore, the recommended parking supply for the Gilroy Sports Park is 1,047 spaces.

The site plan includes 1,049 parking spaces, which will adequately serve the projected demand. A shortfall is projected to occur after the completion of Phase V. It is recommended that 180 of the 298 parking spaces that will be constructed with Phase VI be constructed instead with Phase V to offset the projected shortfall.

The parking demand estimates and recommended supply by phase are presented in Table 11.

TABLE 11

Parking Demand and Supply

Phase	Cumulative Demand	Cumulative Supply		
		Recommended	Provided	Difference
I	0	0	117	+117
II	196	206	278	+72
III	326	343	439	+96
IV	606	637	751	+114
V	886	931	751	-180
VI & VII	996	1047	1049	+2
VII & IX	996	1047	1049	+2

Source: Fehr and Peers Associates, Inc.

The City of Gilroy Zoning Ordinance does not include an off-street parking requirement for ballparks. The most similar land use included in the ordinance is a theater or auditorium with fixed seats. The parking requirement for this lane use is one parking spaces per four seats or seven feet of bench space. The proposed sports park will have approximately 300 feet of bench space for each of the 13 ball fields, for a total of 3,900 feet of bench. The required off-street parking supply would be 558 spaces. The proposed 1,049 parking spaces would be sufficient to meet this requirement.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would

- cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicles trips, the volume to capacity ratio on roads, or congestion at intersections);
- exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;
- result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

- substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- result in inadequate emergency access;
- result in inadequate parking capacity; or
- conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Significant Impact–LOS Below City Standards. With completion of Phase V of the proposed project, the level of service at he intersection of Monterey Street and Monterey Frontage Road would be LOS D during the weekday PM peak hour and LOS E during the Saturday peak hour. This level of service does not meet the standards for roadway operation as contained in the *City of Gilroy General Plan*. This is a significant adverse environmental impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

20. Prior to completion of Phase IV of the proposed project the City of Gilroy shall install a traffic signal at the intersection of Monterey Street and Monterey Frontage Road. The minimum lane configuration shall be:

    - Southbound Approach - one left-turn lane, one through lane, one shared through/right-turn lane;
    - Westbound Approach - one shared lane for all movements;
    - Northbound Approach - one left-turn lane, one through lane, one shared through/right-turn lane;
    - Eastbound Approach - one shared lane, one left-turn lane for all movements.

    Protected left-turn phasing shall be provided for the northbound and southbound approach, while a single signal phase shall be provided to serve the eastbound and westbound approaches.

Less Than Significant Impact–State Highway Traffic. The project is estimated to not add traffic equal to or greater than one percent of the capacity to the four nearby freeway segments. Therefore the project's impact on the segments of U.S. Highway 101 in the study area is estimated to be less than significant and no mitigation measures are required.

Significant Impact–Bicyclist and Pedestrian Safety. The temporary alignment of the Uvas Creek Trail crossing of Thomas Road–Luchessa Avenue would require a detour of approximately 350 feet in order to reach the street crossing point. It is probable that rather than follow this route over the extra distance, that pedestrians

and bicyclists would either cross Thomas Road–Luchessa Avenue directly at the point where the trail first meets Thomas Road–Luchessa Avenue, or cut up or down the levee embankment at the Princevalle Street intersection. This design would result in a potential safety hazard to users of the trail. This potential safety problem would be a significant environmental impact. Implementation of the following mitigation measures would reduce this impact to a less than significant level.

Mitigation Measure

21. The final improvement plan for the Uvas Creek Trail extension, subject to the review and approval of the City of Gilroy Engineering Division, shall include a connection to Thomas Road–Luchessa Avenue that leaves the top of the levee at a point east of Princevalle Street and connects to Thomas Road–Luchessa Avenue at the intersection of Princevalle Street via a built-up earth ramp on the levee's north embankment.

Significant Impact–Bicyclist and Pedestrian Safety. The temporary alignment of the Uvas Creek Trail crossing of Thomas Road–Luchessa Avenue would require bicyclists and pedestrians to cross at the intersection of Thomas Road–Luchessa Avenue and Princevalle Street. Thomas Road–Luchessa Avenue is an arterial roadway with a speed limit of 40 mph. The road curves towards the south as it crosses Uvas Creek; drivers approaching from the south have a sight line to the intersection from approximately 400 feet away. The intersection is controlled by a stop sign on Princevalle Street only. The relatively fast traffic speed on Thomas Road–Luchessa Avenue and somewhat short sight distance for north-bound traffic on Thomas Road–Luchessa Avenue would result in a potential safety hazard to bicyclists and pedestrians crossing Thomas Road–Luchessa Avenue. This potential safety problem would be a significant environmental impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

22. The final improvement plan for the Uvas Creek Trail extension, subject to the review and approval of the City of Gilroy Engineering Division, shall include cross walks across Thomas Road–Luchessa Avenue at Princevalle Street and stop signs on Thomas Road–Luchessa Avenue at Princevalle Street.

Significant Impact–Bicycle Access. Urban Growth and Community Design Policy 26 of the *City of Gilroy General Plan* requires safe and convenient access for bicycles. Monterey Street, south of Thomas Road–Luchessa Avenue is a city-designated bicycle route. The project plans do not indicate a bicycle route connection between Monterey Street and the sports park access road. The lack of a safe and convenient access to the park from a nearby designated bicycle route would be a significant environmental impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

23. The City of Gilroy shall include a Class 1 path on the west side or Class II bicycle lanes on both sides of Monterey Frontage Road as a part of the design and construction of improvements to Monterey Frontage Road between Monterey Street and the sports park access road. The path or bicycle lanes shall be constructed at the same time as other planned improvements to these roads are made, subject to the review and approval of the City of Gilroy Engineering Division.

Significant Impact–Pedestrian Access. There are currently no sidewalks along Monterey Street and Monterey Frontage Road. Project-related traffic increases along these streets will present hazardous conditions to pedestrians accessing the sports park along this route prior to the completion of Phase IV. The lack of a safe pedestrian access along Monterey Street and Monterey Frontage Road would be a significant environmental impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

24. Prior to completion of Phase IV of the proposed project the City of Gilroy shall construct a minimum 6-foot wide sidewalk along the west side of Monterey Frontage Road and a minimum 10-foot wide sidewalk along Monterey Street between Thomas Road–Luchessa Avenue and the sports park access road.

Significant Impact–Parking Supply. The transportation impact analysis projects a demand for 931 parking spaces at the completion of Phase V of the proposed project. Project plans provide 751 parking spaces at the end of this phase. The proposed project would have a shortage of 180 parking spaces at the completion of Phase V. This would be a significant adverse impact related to circulation. With implementation of the following mitigation measure this impact would be reduced to a less than significant level.

Mitigation Measure

25. The City of Gilroy shall include in project plans, subject to review and approval of the City of Gilroy Planning Division, an additional 180 parking spaces to be built prior to completion of Phase V.

No Significant Impact–Internal Circulation. The transportation impact assessment studied the internal circulation of the proposed project. No significant environmental impacts were found and no mitigation measures are required. However, the following design recommendations were made.

Recommendations

The following design changes are recommended to improve internal circulation.

- The outbound lanes of the entry road near Monterey Frontage Road should be narrowed to one lane with paint to allow two outbound lanes (with park personnel directing traffic), if needed.

- An all-way stop sign control should be installed at the intersection of the entry road and the main north-south road. An all-way stop sign control will provide safer conditions for pedestrians crossing this intersection.

- The first driveway on the entrance road (closest to Monterey Frontage Road) should be widened to allow both inbound and outbound traffic and the landscape median along the entry road should be cut back to allow left turns from this parking area onto the entry road. Currently, the on-site traffic is concentrated at the intersection of the entry road and the main north-south circulation road. Allowing left turns out of the eastern-most driveway will diffuse some of this traffic. Landscaping in the median should be low (less than 2.5 feet in height) or taller trees with thin trunks, which should be pruned to maintain adequate sight distance.

- An additional north-south circulation aisle should be provided in the western-most parking area to break-up the long rows of parking spaces. The parking bays and circulation aisles should be extended eastward, eliminating the isolated landscaped barrier at the east end of the parking area.

2.7 Air Quality

Environmental Setting

The City of Gilroy is located within the jurisdiction of the BAAQMD, which is made up of several climatological subregions. The City of Gilroy is located within the subregion known as the Santa Clara Valley.

Climate

The Santa Clara Valley is bounded by the San Francisco Bay to the north and by mountains to the east, south and west. Temperatures are warm on summer days and cool on summer nights, and winter temperatures are fairly mild. At the northern end of the valley, mean maximum temperatures are in the low-80's during the summer and the high-50's during the winter. The mean minimum temperatures range from the high-50's in the summer to the low-40's in the winter. Further inland,

where the moderating effect of the bay is not as strong, temperature extremes are greater. For example, in San Martin, located approximately two and one-half miles north of Gilroy, temperatures can be more than ten degrees warmer on summer afternoons and more than ten degrees cooler on winter nights.

Winds in the valley are greatly influenced by the terrain, resulting in a prevailing flow that roughly parallels the valley's northwest-southeast axis. A north-northwesterly sea breeze flows through the valley during the afternoon and early evening, and a light south-southeasterly drainage flow occurs during the late evening and early morning. In the summer, the southern end of the valley (including Gilroy) sometimes becomes a "convergence zone," when air flowing from the Monterey Bay gets channeled northward into the southern end of the valley and meets with the prevailing north-northwesterly winds.

Wind speeds are greatest in the spring and summer and weakest in the fall and winter. Nighttime and early morning hours frequently have calm winds in all seasons, while summer afternoons and evenings are quite breezy. Strong winds are rare, associated mostly with the occasional winter storm.

The air pollution potential of the Santa Clara Valley is high. High summer temperatures, stable air and mountains surrounding the valley combine to promote ozone formation. In addition to the many local sources of pollution, ozone precursors from San Francisco, San Mateo, and Alameda Counties are carried by prevailing winds to the Santa Clara Valley. The valley tends to channel pollutants to the southeast. In addition, on summer days with low level inversions, ozone can be re-circulated by southerly drainage flows in the late evening and early morning and by the prevailing northwesterly winds in the afternoon. A similar re-circulation pattern occurs in the winter, affecting levels of carbon monoxide and particulate matter. This movement of the air up and down the valley increases the impact of the pollutants significantly.

Pollution sources are plentiful and complex in this subregion (Santa Clara Valley). It has a high concentration of industry at the northern end in the "Silicon Valley" area. Some of these industries are sources of air toxics as well as criteria pollutants. In addition, Santa Clara Valley's large population and many work-site destinations generate the highest mobile source emissions of any subregion in the Bay Area (BAAQMD 1996).

Air Quality Monitoring and Attainment Status

According to the BAAQMD, the San Francisco Bay Area recently lost its designation by the U.S. Environmental Protection Agency (EPA) as an attainment area for the national ozone standard. There were a number of new exceedances during the past few years with the tightening of regulations by the U.S. EPA. The Bay Area air district continues to violate the State ozone standard. The State one-hour ozone standard, nine parts per hundred million (nine pphm), is considerably more stringent than the national standard of 12 pphm.

The BAAQMD maintains an air quality monitoring station in the City of Gilroy. The station monitors ozone and carbon monoxide. At this monitoring station, the number of days with maximum one-hour concentration exceeding nine pphm for the years 1990 through 1995 are as follows: 1990 (5 days), 1991 (5 days), 1992 (12 days), 1993 (6 days), 1994 (3 days), and 1995 (10 days) (BAAQMD 1996).

Project Analysis

Only the sports park and trail extension are proposed for development at this time. It is not known what type of development will ultimately occur on the remaining parcels on the project site. Therefore it is not possible to determine how uses on that part of the project site may affect air quality. The potential effects of the proposed sports park and related on-site and off-site development is discussed below.

Sports Park Operations Emissions

The URBEMIS7 air quality modeling program was used to determine emissions based on vehicle trips generated by the proposed project. URBEMIS7 was developed by the California Air Resources Board (CARB) to determine pollutant emission levels based on traffic generation.

The URBEMIS7 air quality modeling program incorporates various assumptions for trip data in the area of the project site, as well as for the propose project itself. These assumptions include trip generation rates; vehicle fleet mix; trips lengths; average miles per hour; climate; etc.

The URBEMIS7 model was run for sports park build-out conditions in 2020. Daily trips were assumed to be 5,700 (weekend trip generation). The average trip length used in the model was 5.78 miles based on typical trip lengths for the specific land use type and county (Metropolitan Transportation Commission 1993). The results of the air quality modeling are summarized in Table 12.

TABLE 12

Projected Sports Park Air Quality Impacts – URBEMIS7 Modeling Results (Pounds Per Day)

	ROG	NOx	CO
Proposed Sports Park (Winter)	23.26	76.90	270.85
Proposed Sports Park (Summer)	21.39	69.63	235.81
BAAQMD Thresholds	80.00	80.00	550.00

Source: EMC Planning Group Inc. and BAAQMD

BAAQMD establishes thresholds for criteria pollutants. The criteria pollutants of concern in the operation of the proposed project would be those pollutants associated with automobile emissions. These are carbon monoxide (CO) and ozone precursors, i.e., reactive organic gases (ROG) and oxides of nitrogen (NO_X). A proposed project exceeding any of these thresholds is considered to result in a significant adverse impact on air quality. None of these thresholds for air quality would be exceeded during operation of the proposed sports park.

Use of the Uvas Creek Trail would not generate any automobile trips will not have any adverse impacts on air quality. The proposed trail extension would provide a non-motorized access to the project site and could result in a reduction in automobile use and an associated reduction in automobile emissions.

Construction Emissions

Construction-related emissions are generally short-term in duration, but may still cause adverse air quality impacts. Fine particulate matter (PM_{10}) is the pollutant of greatest concern with respect to construction activities. PM_{10} emissions can result from a variety of construction activities, including excavation, grading, demolition, vehicle travel on paved and unpaved surfaces, and vehicle and equipment exhaust. Construction-related emissions can cause substantial increases in localized concentrations of PM_{10}. Particulate emissions from construction activities can lead to adverse health effects as well as nuisance concerns such as reduced visibility and soiling of exposed surfaces (BAAQMD 1996).

It is likely that grading and other construction activities associated with construction of the sports park and related on-site and off-site improvements would result in the emission of PM_{10} in excess of BAAQMD standards.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- cause a violation of any air quality standard or contribute substantially to an existing or projected air quality violation;
- result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); or
- expose sensitive receptors to substantial pollutant concentrations.

Less Than Significant Impact – Sports Park Operations. The proposed sports park would result in approximately 5,700 daily automobile trips at full build-out. These trips would result in the emission of various pollutants into the atmosphere. According to the results of URBEMIS 7 modeling, these emissions would be below

the thresholds established by the BAAQMD. This would be a less that significant impact and no mitigation measure is necessary.

Potentially Significant Impact – Project Construction. The BAAQMD's approach to CEQA analysis of construction-related air quality impacts is to emphasize the implementation of effective and comprehensive control measures rather than detailed quantification of emissions. The BAAQMD has identified a set of feasible control measures for construction emissions of PM_{10}. These control measures are applicable to construction sites that are large in area, and located near sensitive receptors, i.e., residential neighborhoods. Lack of feasible control measures could result in a significant adverse air quality impact due to construction activities. Implementation of the following mitigation measure will reduce this impact to a less than significant level.

Mitigation Measure

26. The following dust control measures shall be incorporated into all permits for any phase of the project. The measures shall be implemented as necessary to adequately control dust subject to the review and approval of the City of Gilroy Planning Division.

    - Water all active construction areas at least twice daily;
    - 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 mph;
    - Install sandbags or other erosion control measures to prevent silt runoff to public roadways;
    - Replant vegetation in disturbed areas as quickly as possible;

- Install wheel washers for all existing trucks, or wash off the tires or tracks of all trucks and equipment leaving the site;
- Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) of construction areas;
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 miles per hour;
- Limit the area subject to excavation, grading and other construction activity at any one time.

2.8 Noise

Environmental Setting

A noise study was prepared by Edward L. Pack associates, Inc. in November 1998. The noise report is included in the Technical Composite, available for review at the City of Gilroy Community Development Department. The report addresses noise impacts on the project site from surrounding sources and potential noise impacts on surrounding areas from activities at the proposed sports park. The following discussion is based on that report.

Noise Measurement and Standards

The noise study measured noise levels in dB_{DNL}, a measurement method that accounts for increased sensitivity to sound at night (10:00 PM to 7:00 AM) by adding a ten-decibel penalty to nighttime noise levels. Noise standards presented in the *City of Gilroy General Plan* are expressed in L_{DN}. L_{DN} and dB_{DNL} are two different notations for the same measurement method. This EIR uses dB_{DNL} throughout.

Outdoor noise standards for the City of Gilroy are included in the *City of Gilroy General Plan* noise element. According to these standards, outdoor noise levels should not exceed 60 dB_{DNL} for residential uses, 65dB_{DNL} for commercial uses and 76 dB_{DNL} for industrial uses. Noise level at residences should not exceed 60 dB_{DNL}, as measured 15 feet outside the rear-most household wall, 20 feet outside the front-most household wall, six feet outside the side-most household wall and ten feet outside the side-most household wall facing a street.

The *City of Gilroy General Plan* has no specific standards for parks, so the noise study used the residential standard for impact evaluation purposes. The city does not have noise standard for bicycle trails, but it would be reasonable to apply the same standard as was applied to the park.

Existing Noise Levels

Existing noise levels at the project site are primarily from traffic on adjacent roads. Principal noise sources identified in the noise study were U.S. Highway 101, Monterey Street and Monterey Frontage Road. Additional noise sources include semi-trucks, barking dogs and general household activity from farm residences along Monterey Frontage Road and Farman Lane.

Existing noise levels were measured at two locations, using continuous recordings over two separate 24-hour periods from October 29 to October 31, 1998. Details of the measurements taken and methodology used are contained in the noise study.

The noise study found the existing noise level at the entry point to the sports park access road to be 63 dB_{DNL}. This point is along Monterey Frontage Road. It is reasonable to assume that noise levels along the remainder of Monterey Frontage Road are similar. At the sports park site boundary nearest to Monterey Frontage Road (420 feet east of the centerline) the existing noise level is 52 dB_{DNL}. Noise levels are of course higher near the noise source and lower farther from the noise source.

It is reasonable to assume that existing noise levels along the proposed Uvas Creek Trail extension are lower than 52 dB_{DNL}, based on the distances from the identified noise sources.

Project Analysis

Ambient Noise Exposure to the Proposed Project

The noise study bases its project impacts analysis on projected noise levels at project build-out in 2020.

Project traffic study projections for 2020 were used to estimate future noise levels from traffic on Monterey Street and Monterey Frontage Road. The noise study concludes that noise increases on these streets will be approximately 0.4 dB and 0.2 dB respectively. Future noise levels from traffic on U.S. Highway 101 were based on estimates made for the update of the *Santa Clara County General Plan* in 1994. Noise generated by traffic on U.S. Highway 101 was estimated to increase by approximately 3 dB by 2020.

The ambient noise level in 2020 is projected to be approximately 56 dB_{DNL} at the sports park site boundary nearest to Monterey Frontage Road (420 feet east of the centerline). This level is well within the standards of the *City of Gilroy General Plan* for all land uses. Ambient noise levels at the proposed sports park would be within city standards.

The ambient noise level in 2020 at the entry point to the sports park access road is projected to be approximately 67 dB_{DNL}. It could be assumed that the noise level would be similar along all of Monterey Frontage Road. This noise level exceeds the

city standards for both residential and commercial uses, though at locations somewhat farther from Monterey Frontage Road, the noise levels may be within the standards for commercial uses.

Sports Park Noise Impacts on Surrounding Uses

Access Road Noise. The main portion of the sports park site is accessed from Monterey Frontage Road by a 600 foot long access road, designed to carry two lanes of traffic into and one lane of traffic out of the sports park site. The principal concern of noise from this access road traffic is its potential impact on existing nearby residences. There is one residence located adjacent to the proposed access road, and another approximately 300 feet north of the proposed access road. The average weekend traffic along the access road is projected to be 5,700 trips. Assuming an average speed of 25 miles per hour, the noise level at the nearest residence would be 58 dB_{DNL}. The 60 dB_{DNL} contour would be 11 feet from the nearest side wall of the house. The noise levels would be within the city standards at the closest residence. Therefore there would be no significant noise impacts from access road traffic.

Athletic Events Noise. Since no project specific data is available, projected sports park noise levels from athletic events is based on previous acoustical studies of athletic event sound levels. These noise levels include noise from athletic activity, crowds and public address systems. Table 13 lists typical noise levels from the types of athletic events expected to be held at the proposed sports park.

TABLE 13

Athletic Event Noise Exposure

Event Type	Db_{DNL}	Distance from Source
Youth Soccer	51	260 feet
Youth Baseball	51	260 feet
Adult Softball	50	260 feet
Roller Skating	55	60 feet

Note: Source locations are at the center of the soccer field and roller skating area, and home plate on the baseball and softball fields.

Source: Edward L. Pack Associates, Inc.

For purposes of projecting maximum future noise exposure from the proposed sports park, the noise study analyzed four different athletic event scenarios. These scenarios were:

1. Peak Soccer Season.

   - All seven soccer fields run competitions simultaneously from 9:00 AM until 10:00 PM. Games last 40 minutes with 20-minute breaks between games.

2. Peak Soccer Season and Skating Area Activity.

   - All seven soccer fields run competitions simultaneously from 9:00 AM until 10:00 PM. Games last 40 minutes with 20-minute breaks between games.

   - Both skating areas are in continuous use from 10:00 AM until 6:00 PM.

3. Peak Baseball Season.

   - All 13 baseball fields run competitions simultaneously from 9:00 AM until 10:00 PM. Games last one hour and there are 15-minute breaks between games.

4. Peak Baseball Season and Skating Area Activity.

   - All 13 baseball fields run competitions simultaneously from 9:00 AM until 10:00 PM. Games last one hour and there are 15-minute breaks between games.

   - Both skating areas are in continuous use from 10:00 AM until 6:00 PM.

Other park uses are of low intensity and would not contribute significantly to the overall noise levels at the proposed sports park. These activities, which include bocci ball, volleyball, horseshoes and a playground were omitted from the noise study scenarios.

Projected noise exposure levels were calculated for four different residential locations. These locations are illustrated in Figure 23. The noise exposure at each of these locations under each scenario is summarized in Table 14.

The maximum projected noise impact would be at Residence A (the residence on Monterey Frontage Road 300 feet north of the park access road) under Scenario 4 (peak baseball season and hockey activity). The project noise level at this residence would be 57 dB_{DNL}, which is within the city's standard. Therefore there would be no significant noise impacts from athletic events.

Construction Noise Impacts on Surrounding Uses

Construction of the sports park and related on-site and off-site improvements would involve grading, hauling of materials and installation of pavement. Short-term noise

could occur from these construction activities. Construction equipment typically generates noise levels in the range of 70 to 90 decibels at a distance of 50 feet. The nearest residences to the sports park site are located along Monterey Frontage Road and north of Thomas Road–Luchessa Avenue. Residences along Monterey Frontage Road would be subjected to excessive noise from trucks hauling materials and equipment to the project site.

TABLE 14

Projected Residential Noise Exposure from Athletic Events (dB_{DNL})

Scenario	Residence A	Residence B	Residence C	Residence D
1. Soccer	53	53	52	52
2. Soccer and Skating	54	54	53	52
3. Baseball	56	56	55	55
4. Baseball and Skating	57	56	55	55

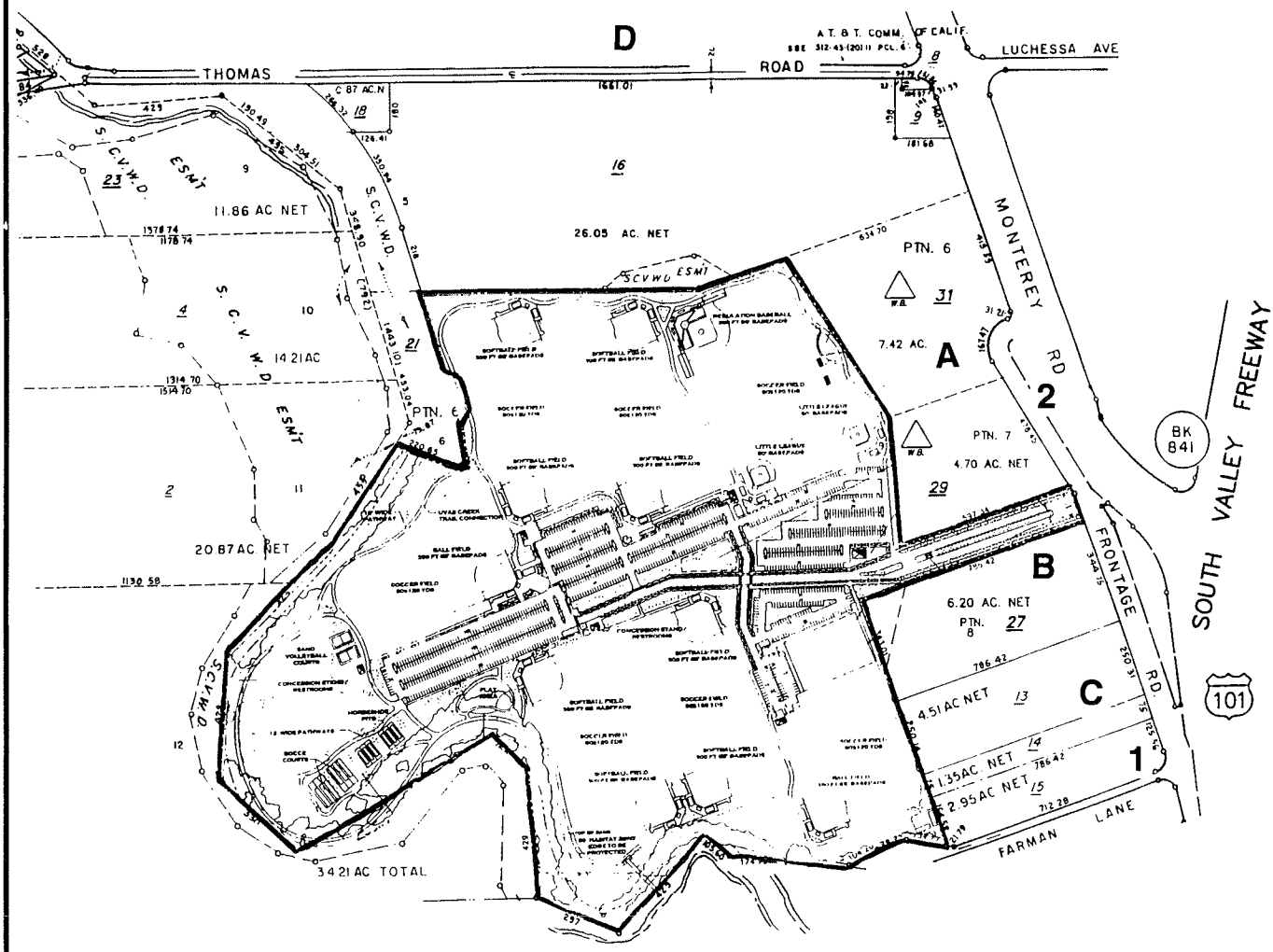
Source: Edward L. Pack Associates, Inc.

Residences north of Thomas Road–Luchessa Avenue are located approximately 700 feet from the sports park site, and residences along Monterey Frontage Road are located approximately 400 feet from the sports park site. Noise diminishes by between 3 and 6 dB for each doubling of distance from the noise source. If equipment generates noise at levels up to 90 dB at a distance of 50 feet, at approximately 800 feet the noise would diminish to between 78 and 66 dB. Houses located within 800 feet from the noise source would experience noise levels in excess of the city standards of 60 dB for residential uses. Construction activities would therefore generate noise levels that would exceed city standards.

Other Project Noise Impacts on Surrounding Uses

Existing portions of the Uvas Creek Trail are located adjacent to residences. The use of the trail by bicyclists, pedestrians and others would not be likely to result in noise levels that would exceed city noise standards.

The proposed uses of the project site parcels outside the sports park site are not known, and no projection can be made with regard to potential noise impacts associated with the future use of those parcels. A noise study would be required when those parcels are developed, to determine those potential impacts.



Locations for which noise exposure calculations were made are labeled **A, B, C** and **D**.

24-hour existing noise recordings were made at locations labeled **1** and **2**.

No Scale

Source: Edward L. Pack Associates, Inc.

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Noise Exposure Study Locations

Figure 23

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Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G states that a project would normally have a significant effect on the environment if it would:

- result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- result in exposure of persons to or generation of 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;

Less Than Significant Impact–Noise from Park Activities. Activities at the proposed sports park, including athletic events and traffic entering and exiting the project site would generate noise. The noise generated by these activities would be within acceptable city standards at surrounding locations. Noise generated by activities at the sports park would have a less than significant impact, and no mitigation measure is necessary.

Significant Impact–Construction Noise. Construction activities at the project site would result in noise levels that exceed the standards specified in the *City of Gilroy General Plan*. This would be a significant environmental impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure.

27. The following language shall be included on any permits issued for the sports park, subject to the review and approval of the City of Gilroy Engineering Division. "All noise generating construction activities shall be limited to weekdays between 7:00 AM and 7:00 PM, and to Saturdays and City holidays between 9:00 AM and 7:00 PM. No construction is allowed on Sundays. In addition, temporary berms or noise attenuation barriers shall be utilized when necessary."

2.9 Archaeological Resources

Environmental Setting

A cultural resources evaluation of the project site was conducted by Archaeological Resource Management in October 1998. At the request of the California Historical

Resources Information System, Northwest Information Center, the reports are not available for public review. California Government Code Section 6254.10 exempts archaeological site information from the California Public Records Act, which requires that public records be open to public inspection. The following discussion is based on the cultural resources evaluation.

The project site is located along the banks of Uvas Creek, in an alluvial area of the Santa Clara Valley. These alluvial areas are known to contain many buried prehistoric resources.

The preliminary archaeological investigation consisted of an archival search and surface reconnaissance. The archival search was conducted at the Northwest Information Center of the Archaeological Site Inventory. One recorded historic site was found to be located on the project site, in an area not currently proposed for development, and three reported historic sites were found to be located within one half mile of the project site. While no reported or recorded prehistoric archaeological sites were found on the project site, two such sites were found to be located within one half mile of the project site.

The surface reconnaissance was conducted by a field archaeologist on the sports park site and the trail extension site. No prehistoric or historic cultural resources were observed.

An historic site is located in the northwest corner of the project site. A small wooden cabin built in the 1850's was located there and still occupied as late as 1974 when it was recorded in a report to the California Archaeological Site Inventory. This structure no longer exists.

Two prehistoric sites were identified in the archaeological record within one half mile of the project site. These consist of shells, mortars and other related artifacts, and are currently buried. Several houses of historic significance are located along Monterey Street.

Project Analysis

Construction of the sports park and related on-site and off-site improvements would involve the use of heavy equipment for grading, trenching and construction activities. It is possible that prehistoric or historic cultural resources would be discovered during these activities.

At this time only the sports park and related on-site and off-site improvements are proposed for development. The remaining parcels on the project site are expected to remain in agricultural use in the near term. It is not likely that continuation of existing agricultural operations would affect potential prehistoric or historic cultural resources on the project site.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines section 15064.5;
- cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5;
- directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; and/or
- disturb any human remains, including those interred outside of formal cemeteries.

Potentially Significant Impact. Background research and a field reconnaissance conducted by Archaeological Resource Management in October 1998 indicates that the project area does not contain any known significant cultural resources. However, the Santa Clara Valley is known to be rich in buried prehistoric resources, especially the alluvial soils found near waterways. Therefore, due to the proposed project's location in a creek-side environment and the presence of a recorded historic resource directly adjacent to the trail extension, there is an elevated chance that currently unidentified buried cultural resources may be found during construction on the project site. Disturbance of prehistoric or historic cultural resources would be considered a significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measures

28. The City shall contract with a qualified archaeologist to arrange a schedule for monitoring during grading and excavation activities due to the project site's creek-side location and proximity to recorded historic and prehistoric sites.

29. Due to the possibility that significant buried cultural resources might be found during construction the following language shall be included any permits issued for the project site, including, but not limited to building permits for future development, subject to the review and approval of the Gilroy Planning Division:

> If archaeological resources or human remains are discovered during construction, work shall be halted at a minimum of 200 feet from the find and the area shall be staked off. The project developer shall notify a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented.

30. In the event of an accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall ensure that this language is included in all permits in accordance with CEQA Guidelines section 15064.5(e):

> If human remains are found during construction there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of Santa Clara County is contacted to determine that no investigation of the cause of death is required. If the coroner determines the remains to be Native American the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code Section 5097.98. The landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if: a) the Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission; b) the descendent identified fails to make a recommendation; or c) the landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

2.10 Aesthetics

Environmental Setting

This section addresses the potential impacts of the proposed project on the aesthetic qualities of the area.

The project site has a pastoral rural ambiance, with clusters of farm buildings and cultivated fields set to a backdrop of riparian vegetation. The land is primarily undeveloped farmland with several houses and their associated farm buildings located apart from one another along the eastern side of the project site. The project site is located adjacent to Thomas Road–Luchessa Avenue, Monterey Street and

Monterey Frontage Road and within view of U.S. Highway 101. The farm fields and buildings and the vegetation lining the banks of Uvas Creek are visible from these vantage points. The level ground and lack of distinctive features makes it difficult to discern where one parcel ends and another begins. Figure 24 shows the existing character of the project site. U.S. Highway 1 affords a better overview of the project site than other roadways because of the slight elevation of the highway.

A propane gas facility is located at the corner of Monterey Street and Thomas Road–Luchessa Avenue. This corner is out of character with the remainder of the project site, but in character with other land uses north and east of the project site along Monterey Street.

Adjacent land uses to the north and east of the project site present an abrupt edge to the predominately rural feeling of the project site. Two hotels are under construction on the land to the eastern side of Monterey Street, between U.S. Highway 101 and the project site. Existing houses fronted by a six-foot tall concrete wall are visible immediately north of Thomas Road–Luchessa Avenue. Additional urban development is located to the east of U.S. Highway 101. The project site is on the southern edge of the Gilroy urbanized area. Project Analysis

Character of the Area

Development of the project site would permanently alter the existing rural character of the area. The sports park site would largely remain as open space. However, the access road, parking lots, parked cars, pathways and structures would introduce a noticeable developed aspect to the park area. Median strip plantings, other landscaped areas and the green of the irrigated athletic fields would soften this. Though it would remain as open space, the overall aspect of the developed sports park would present a much more urban face than the existing rural scene.

The context of the view is nearly as important as the physical view itself, as it alters the perception of the viewer. In the context of a rural setting the sports park would appear rather stark and out-of-place. However, with surrounding parcels to the north and east already developed, the sports park would appear as an area of logical transition between the built and rural environments. Public attitudes toward a project can also affect the way in which the development is viewed. As may be the case with the sports park, a project in which there is considerable civic pride would likely be viewed more favorably from a visual standpoint.

The proposed Uvas Creek Trail extension would have very little visual impact. The paved trail would measure approximately eight feet wide. No lighting is proposed for the trail.

Sports Park Nighttime Lighting

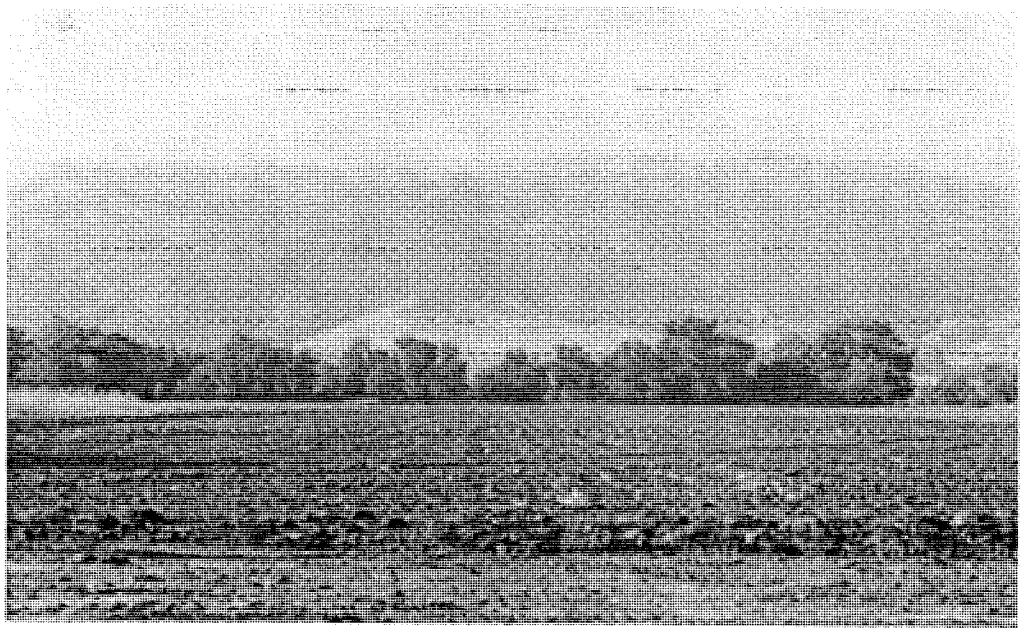
The sports park is proposed to be lit for nighttime use. Athletic field lighting is generally quite intense and may be visible for a mile or more away. The effect of field lighting varies considerably with the type of lighting employed, intensity of the light, height of the lighting, and the viewer's distance from the source. Recent technical advances have resulted in lighting that is more directed and has less "spillage" into surrounding areas. Use of this technology reduces the severity of lighting impacts.

The effect of sports field lighting differs greatly depending on the viewer's distance form the light source. Very close to the lighted fields the light would be more likely to shine into nearby yards and windows. The view of bright lights would affect the outward view from houses with a view line towards the light standards. From greater distances, the view is of a bright glow in an otherwise darker sky. This glow can be quite noticeable, particularly in a small city that is surrounded by mountains and farmland. The light could be perceived as a nuisance by anyone accustomed to the normal darkness of night. Nighttime lighting is of special concern to observatories, as it interferes with the ability to see stars and other outer space objects. The Lick Observatory on Mt. Hamilton is located approximately 20 miles north of the project site. Lighting at the project site could incrementally affect the observatory.

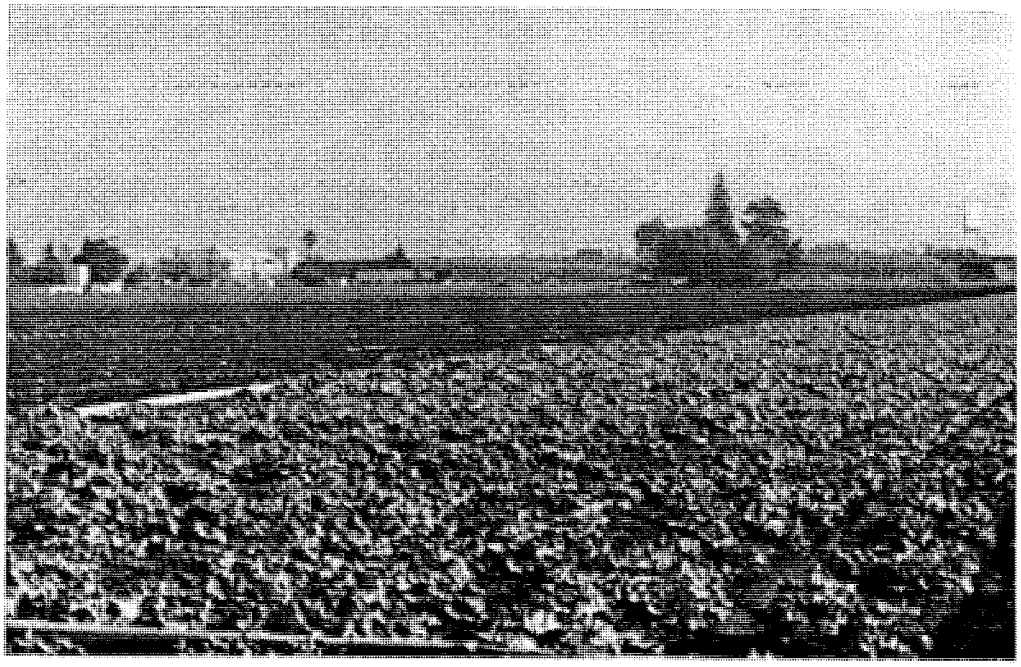
Each field at the proposed sports park would be equipped with field lights. Each softball/baseball field would have six light poles. The two poles located nearest home plate would be approximately 50 feet tall and contain three to four lights each. Two poles located near first and third base would be approximately 50 feet tall and contain six to nine lights each. Two 60- to 70-foot poles would be located in the outfield and contain ten to fifteen lights each. In most instances the preliminary plans show one soccer field overlaid on two softball/baseball fields. Therefore, soccer fields would be lit by up to 12 light poles.

Field lights would be turned on only for fields on which there were games scheduled on a particular night. They would be used most often for league play as opposed to tournament play (Derek McKee, personal communication, November 13, 1998).

The field lights specified for the proposed sports park are manufactured by Musco Lighting. Company literature states that light spill and glare are reduced by up to 95 percent compared to standard sports lighting. The lights are a "shielded" design that directs light downward and reduces the amount of light that escapes into the sky. Musco Lighting is one of several manufacturers recommended as producing sports lighting with reduced light emissions, by the public information office of the McDonald Observatory (Bill Wren, personal communication, December 1, 1998).



Rural Character of the Project Site



Urban Character of surrounding areas. This photo shows hotels under construction east of the project site. A residential area is located to the north of the project site.

Source: EMC Planning Group Inc.

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Existing Character of Project Site

Figure 24

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The field lights at the proposed athletic fields would be approximately 350 to 600 feet from the houses along Monterey Frontage Road and 700 feet from the closest subdivision houses near Thomas Road–Luchessa Avenue. The field lights nearest to these houses would be faced away from the houses. At the proposed distances the direct light intrusion into homes should be minimal or non-existent. The lights would be visible from homes in the area where the view is not obscured by landscaping close to the house. The lights would also be visible from nearby streets and U.S. Highway 101. The distant glow should be minimized due to the design of the lights.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- have a substantial adverse effect on a scenic vista;
- 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.

Less than Significant Impact–Change in Rural Character. Development of the project site would permanently alter the existing rural character of the area. Though it would remain as open space, the overall aspect of the developed sports park would present a much more urban face than the existing rural scene. In the context of a rural setting the sports park would appear rather stark and out-of-place. However, with surrounding parcels to the north and east already developed, the sports park would appear as an area of transition between the built and rural environments. The change in character brought on by development of the sports park would be a less than significant impact. No mitigation measure is necessary,

Less than Significant Impact–Nighttime Lighting. The proposed project would introduce a major new source of light to the local area. The lights are sufficiently distant from the nearest homes that they should not present a problem with interior light intrusion. The lights will be noticeable directly from area streets and as a general glow in the night sky from more distant locations. The lights specified in project plans use a shielded design that directs light towards the playing field and reduces fugitive light emission. With the use of this type of light the proposed project will have a less than significant effect on nighttime visual qualities of the area, and no mitigation measure is necessary.

2.11 Issues Determined to Have Less Than Significant Impacts

Pursuant to CEQA Guidelines section 15063 an initial study was prepared to determine the potentially significant effects of the proposed project. The initial study determined that certain issues would have a less than significant impact. These issues were population and housing and energy. These are discussed briefly in this section of the EIR.

Population and Housing

The proposed project would not alter the population of the community, and would have no effect upon the demand for housing. The sports park is estimated to provide approximately three to four permanent jobs and ten to 15 part-time or seasonal jobs when it is fully developed. The proposed project would have no significant adverse effects on population or housing.

Energy

The proposed project would not use energy in a wasteful or excessive manner. The sports field lighting would be used only for field on which games are scheduled on a given night. The lights specified in project plans use fewer light fixtures and require less energy than do conventional athletic field lights. The proposed project would have no significant adverse effects on energy.

3.0 Related Environmental Issues

3.1 Unavoidable Significant Adverse Environmental Impacts

An unavoidable significant adverse environmental impact is a significant adverse impact that cannot be reduced to a less than significant level through the implementation of mitigation measures. CEQA Guidelines section 15093 requires that a lead agency make findings of overriding considerations for unavoidable significant adverse environmental impacts before approving a proposed project.

The loss of prime farmland is generally considered a significant and unavoidable adverse environmental impact. The proposed project would result in the loss of the 133.2 acres of prime farmland (though some of this land is used for commercial and residential farm-related uses). The establishment of the Gilroy Agricultural Lands Area by both the City of Gilroy and the County of Santa Clara serves as a regional mitigation for losses of prime farmland in southern Santa Clara County, outside of the agricultural lands area. Although this regional mitigation has been implemented, it does not serve to reduce the loss of prime farmland to a less than significant level and the proposed project would still be considered to have a significant and unavoidable impact on prime farmland.

CEQA Guidelines section 15093(a) requires the decision-making agency (City of Gilroy, as well as the Santa Clara County LAFCO) to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable". Section 15093(b) states that when the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

The City of Gilroy is expected to make the following findings regarding the loss of prime farmland prior to approving the project:

- The Gilroy Agricultural Lands Area is, at least partial mitigation for the loss of the 133.2 acres of prime farmland.

- The project site is adjacent to urban uses to the north (residential) and east (commercial), and is easily accessed from U.S. Highway 101.
- The sports park is a social benefit highly desired by the City of Gilroy and its citizens.
- There are no alternative sites for the sports park that would not result in the conversion of prime farmland.
- The project site is in a flood zone, which makes it undesirable for intensive urban development and therefore, was available at a price the City of Gilroy could afford. Alternative sites were not available at a price affordable to the City.

3.2 Cumulative Impacts

CEQA Requirements

CEQA Guidelines section 15130 requires a discussion of the significant cumulative impacts associated with the proposed project. A cumulative impact is an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. CEQA Guidelines section 15130(b) requires the following:

> The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact...

CEQA requires a cumulative development scenario to consist of either a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or, a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

When based on a list of past, present, and probable future projects, factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. "Probable future projects" may be limited to those requiring an agency approval for an application which has been received at the time the notice of

preparation is released, unless abandoned by the applicant; projects included in an adopted capital improvements program, general plan, regional transportation plan or other similar plan; projects included in the summary of projections of projects (or development areas designated) in a general plan or a similar plan; projects anticipated as later phases of a previously approved project; or those public agency projects for which money has been budgeted.

The geographic area affected by the identified cumulative impacts, and an explanation of the basis of the geographic scope used in analyzing cumulative impacts, must be presented.

Cumulative Conditions Basis

Cumulative conditions used for the proposed project include existing development, approved but not yet built projects, and probable projects in the southern part of Gilroy. The two projects that were probable at the time that the cumulative traffic analysis was prepared, The Hilton Garden Inn and the Gilroy Cinemas, have since been approved by the City of Gilroy. Traffic from the proposed project was anticipated to have a potentially significant impact on the local area, and to be likely to contribute with other projects towards significant cumulative impacts. Southern Gilroy was selected as the area of study for cumulative impacts because traffic from the proposed project would most affect southern Gilroy. Approved projects included in the cumulative analysis are summarized in Table 15. Figure 25 shows the locations of approved projects included in the cumulative analysis.

Investigation indicates that the proposed project may have potentially significant cumulative impacts in the areas of agricultural resources, hydrology, transportation/circulation and air quality. The project is unlikely to have potentially significant cumulative impacts in the areas of geology, biological resources, public services, noise, archaeological resources or aesthetics.

Agricultural Considerations

The proposed project would add 133.2 acres of prime farmland (including some land currently developed with rural residential and commercial structures) to the City of Gilroy Urban Service Area. Land within the Urban Service Area is generally expected to be developed within an approximate five-year timeframe. Prime farmland is a non-replaceable resource. Each project that involves the conversion of prime farmland to non-agricultural uses contributes to the depletion of this resource.

Approximately 1,900 acres of prime farmland have been converted to non-agricultural uses in Santa Clara County since 1990 (California Department of Conservation 1996 and Santa Clara County 1994). This represents a loss of approximately 5.4 percent of the total prime farmland that existed in Santa Clara County in 1990. The proposed project would transfer approximately 0.4 percent of the remaining prime farmland in the county into the City of Gilroy Urban Services Area. While some of this land would remain in agriculture for an indefinite period, the land would ultimately be developed.

TABLE 15

Approved Projects in the Vicinity of the Project Site

Projects	Location	Use and Size
Motel 6	East of Monterey Street; west of U.S. Highway 101	129 rooms (replacing 56 rooms)
Truck Stop	East of U.S. 101; east of Monterey Street	Overnight truck stop, gas station, convenience market, fast food restaurant, motel, and mini storage
Eagle Ridge	West of Santa Teresa Boulevard, between Third Street and Miller Avenue	650 single-family and townhouse units, 18-hole golf-course
The Villas	West end of Oakbrook Drive, west of Thomas Road	75 single-family residential units
The Uplands	West of Thomas Road; North of Luchessa Avenue	60 single-family residential units
Hilton Garden Inn	East of Monterey Street; west of U.S. Highway 101	113 rooms
Gilroy Cinemas	West of Monterey Street; south of Tenth Street	1,100 seat theater

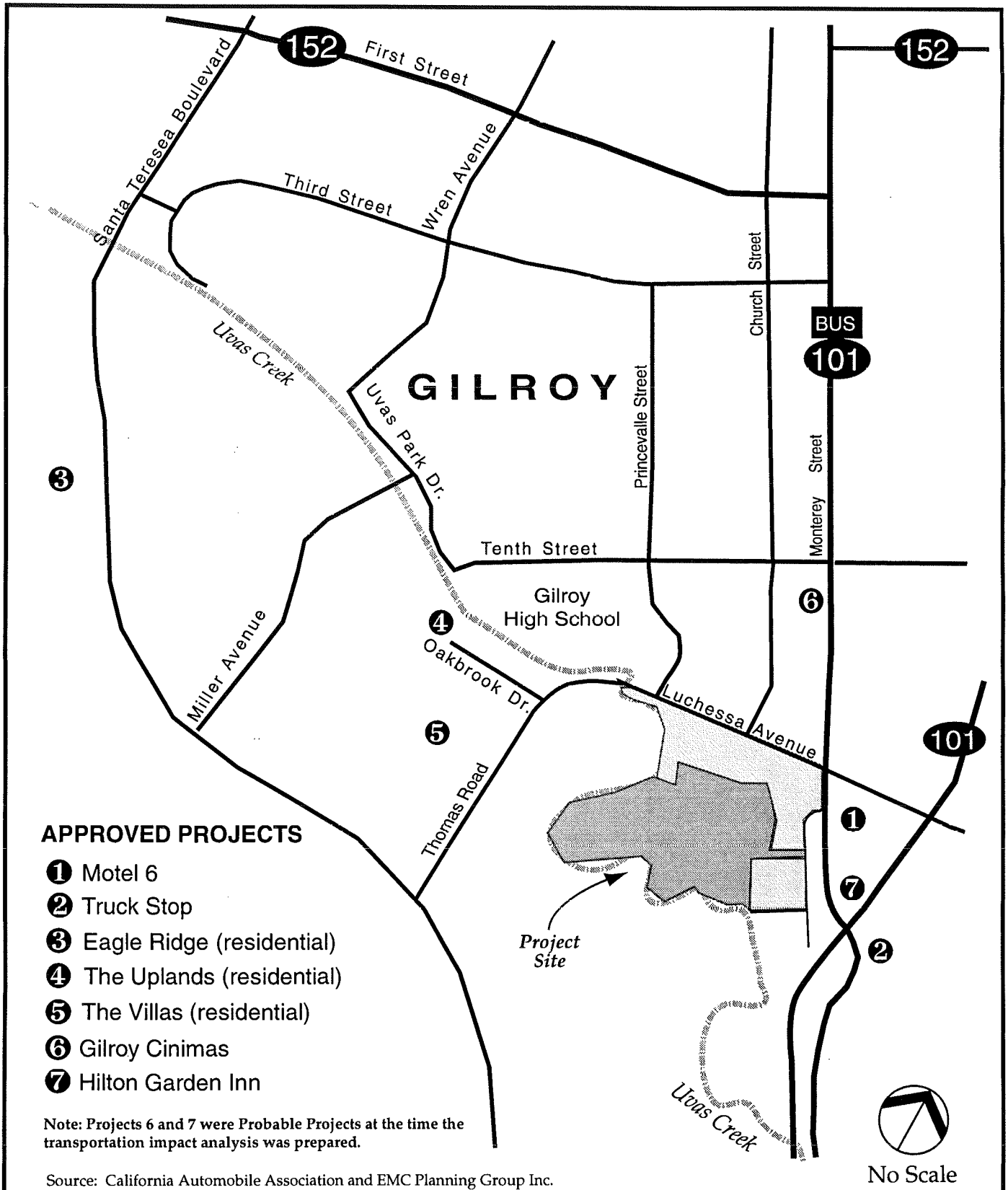
Source: Fehr and Peers Associates, Inc. and City of Gilroy

The establishment of the Gilroy Agricultural Lands Area serves as partial mitigation for development elsewhere on the region's prime farmlands, however, this mitigation does not replace the un-protected prime farmland, and it's conversion to non-agricultural uses is a significant environmental impact.

The proposed project, along with The Uplands, The Villas and Eagle Ridge residential developments and the truck stop project, would convert prime farmland to non-agricultural uses. The proposed project and cumulative projects would convert approximately 173 acres of prime farmland. The conversion of prime farmland would be a significant cumulative environmental impact.

Hydrology

Urban development in the Pajaro River watershed has resulted in the covering of many acres of permeable land with impermeable surfaces such as pavement and structures. Essentially none of the rainfall that hits impervious surfaces is absorbed into the surfaces on which it falls. When rainfall lands on these impermeable surfaces, it drains on the surface and eventually into a drainage pipe or watercourse. Storm water in the Pajaro River watershed that is not absorbed into the soil or retained in reservoirs eventually makes its way into the Pajaro River.



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Cumulative Projects

Figure 25

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Under certain storm conditions increases in the amount of area covered in impervious materials results in increased rates of run-off into streams. The increased rate of storm water run-off can result in higher flows in streams and in a more rapid rise in streams' water levels. Increased flows in streams often result in local or widespread flooding in areas adjacent to the stream. Two major floods have occurred in the lower reaches of the Pajaro River in the past several years, resulting in extensive property damage and displacement of residents. However, during flood conditions it is likely that the increase in run-off due to new impervious surfaces would be less than significant, since under these conditions the run-off rate from pervious surfaces is typically high also.

Transportation/Circulation

Traffic volumes for cumulative conditions were estimated by adding traffic associated with probable projects to traffic volumes estimated for project conditions (the proposed project and approved projects). PM peak-hour traffic volumes for these developments were estimated based on traffic reports prepared for the developments and provided by the city. Saturday peak-hour volumes were estimated using trip generation rates from *ITE Trip Generation Manual.*

The operation of the key intersections was evaluated as to the probable level of service. Intersection levels of service under cumulative conditions are presented in Table 16.

Under cumulative conditions, the intersection of Monterey Street and Monterey Frontage Road, with two-way stop-sign control, is projected to operate at LOS F during both peak hours. With the installation of a traffic signal, the intersection is projected to operate at LOS C during both the PM and Saturday peak hours.

The intersections of Thomas Road–Luchessa Avenue and Princevalle Street and Thomas Road–Luchessa Avenue and Church Street are projected to continue to operate at acceptable levels. The intersections would operate at LOS A during both the PM and Saturday peak hours.

The cumulative conditions level of service at the intersection of Monterey Street and Monterey Frontage Road would be below the standards prescribed by the *City of Gilroy General Plan.* A mitigation measure in Section 2.6 Transportation/ Circulation would require the installation of a signal light at this intersection prior to completion of Phase IV of the proposed sports park. With implementation of this mitigation measure the proposed project would not result in a significant cumulative traffic impact.

TABLE 16

Cumulative Conditions Intersection Levels of Service

Intersection	PM Peak		Saturday Peak	
	Average Delay (sec)	LOS	Average Delay (sec)	LOS
Monterey Street and Monterey Frontage Road (Two-Way Stop Controlled)	116.9	F	241.4	F
Monterey Street and Monterey Frontage Road (Signalized)	16.7	C	18.8	C
Thomas Road–Luchessa Avenue and Princevalle Street (Two-Way Stop Controlled)	1.7	A	1.3	A
Thomas Road–Luchessa Avenue and Church Street (Two-Way Stop Controlled)	1.7	A	2.1	A

Average total intersection delay for unsignalized intersection and whole intersection weighted average stopped delay for signalized intersections, expressed in seconds per vehicle

LOS calculations performed using the CMP level of service analysis program, TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections and the *1985 Highway Capacity Manual* delay methodology for signalized intersections

Source: Fehr and Peers Associates Inc.

Air Quality

The BAAQMD does not set a specific threshold for cumulative mobile-source emission increases in local jurisdictions. It is assumed that the cumulative projects will exceed BAAQMD project-specific thresholds for at least one pollutant. The individual projects when analyzed together are anticipated to result in a significant cumulative impact on air quality.

The San Francisco Bay Area recently lost its designation by the U.S. EPA as an attainment area for the national ozone standard. On June 25, 1998, the U.S. Environmental Protection Agency changed the Bay Area's classification for national 1-hour ozone standard from a "maintenance" area to an "unclassified nonattainment" area. The re-designation action is EPA's formal recognition that the region has had recent violations of the national ambient air quality standard for ozone. The notice requires San Francisco Bay Area co-lead agencies to prepare a revision to the State Implementation Plan (SIP), a compilation of plans and regulations that govern how the region compiles with the Federal Clean Air requirements. The 1999 SIP will identify how the region will re-establish an attainment record in the future.

The addition of the vehicular trips and associated emissions from the proposed project would contribute to cumulative air quality impacts in a non-attainment area.

3.3 Significant Irreversible Environmental Changes

The proposed project would result in the permanent loss of prime agricultural land. While this loss is mitigated in part by the establishment of the Gilroy Agricultural Lands Area, the prime agricultural land lost to the proposed project is not replaceable. The loss of prime agricultural land would be a significant irreversible change.

3.4 Growth Inducing Impacts

Growth inducement generally refers to the likelihood that a proposed project will foster growth in the surrounding area, either directly or indirectly. The most common factor in fostering growth is the removal of obstacles to population or economic growth. Potential growth-inducing impacts should be discussed in relation to both the potential impacts on existing community service facilities and the way a project may encourage and facilitate other activities that could significantly affect the environment.

The proposed project would require the extension of a recycled water distribution line. Recycled water is used primarily for irrigation of large park or open space areas, and extension of this line would not be likely to induce concentrated urban growth. All other infrastructure is currently available near the project site.

The project site is currently within the City of Gilroy 20-year development area. The proposed project would transfer the project site into the Urban Service Area. Development within an urban service area is generally expected to occur within an approximate five-year timeframe. Currently only the sports park site is proposed for development. Development of those parcels that are not part of the proposed sports park could be hastened by the development of the sports park. The proposed project could have growth inducing impacts on the project site and possibly on adjacent areas.

3.5 Alternatives

CEQA Guidelines section 15126.6 (a) requires a description of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and an evaluation the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to

a project, but must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. CEQA Guidelines section 15126.6 (b) further requires that the discussion of alternatives focus on those alternatives capable of eliminating any significant adverse environmental impacts or reducing them to a level of insignificance, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.

The following project alternatives were analyzed:

- Alternative #1 "No Project" Alternative;
- Alternative #2 (Alternative Location A)
  Santa Teresa Boulevard at State Highway 152;
- Alternative #3 (Alternative Location B)
  Santa Teresa Boulevard and Miller Avenue;
- Alternative #4 (Alternative Location C)
  Monterey Road at Bolsa Road.

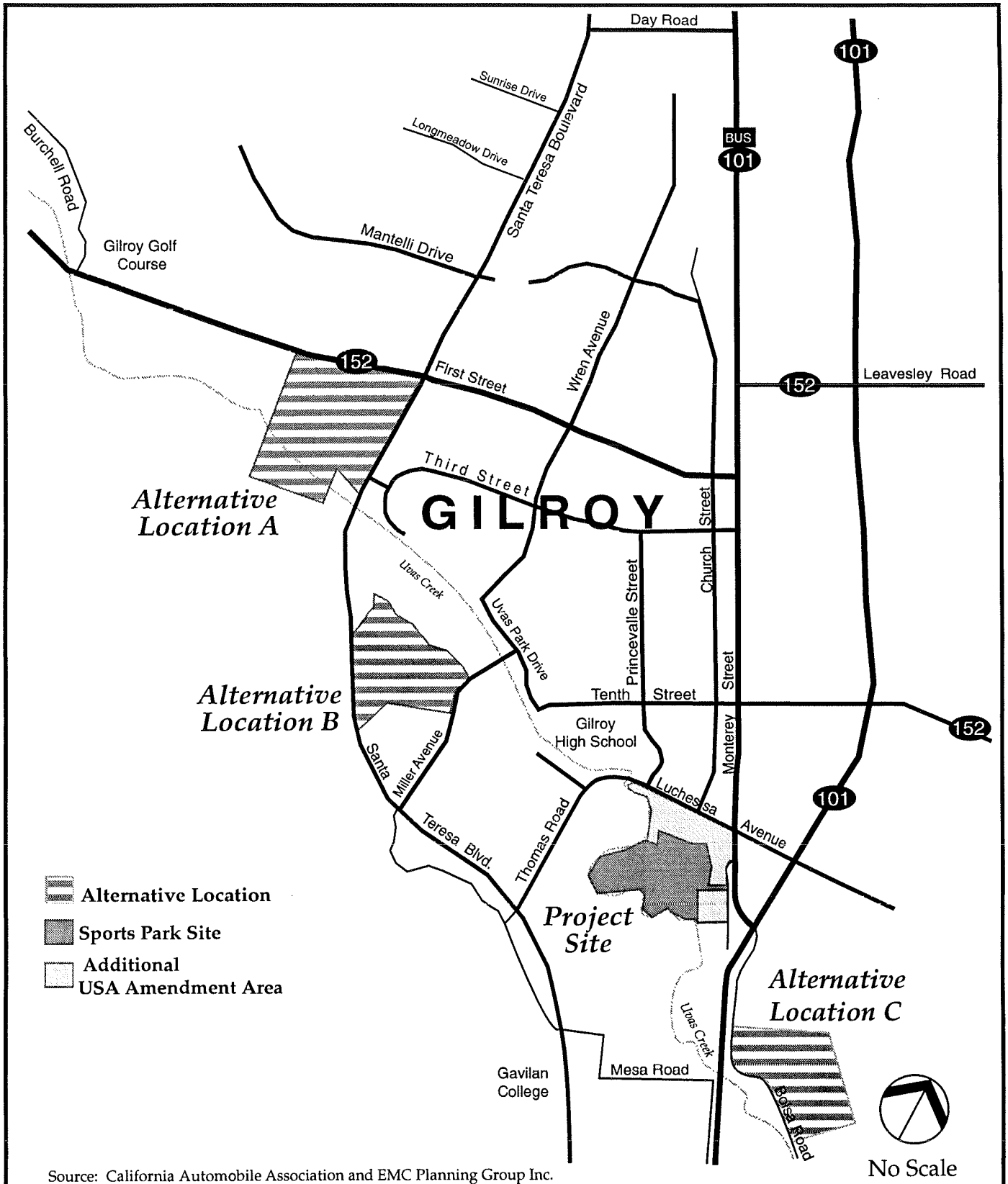
The alternative project locations are shown in Figure 26.

Alternative #1 "No Project" Alternative

CEQA Guidelines section 15126.6 (e) stipulates that the "No Project" alternative be evaluated along with its impacts. The "No Project" alternative analysis must discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

The *City of Gilroy General Plan* and the *Santa Clara County General Plan* both require that only land within the city limits be developed. Land which is annexed to the city must be within or concurrently added to the city's Urban Service Area. The Urban Service Area is that area which is currently developed or expected to be developed within an approximate five-year time period. The project site is currently within the city's planning area and 20-year growth boundary, but outside the city limits and Urban Service Area.

The project site is currently used for agricultural production. It would be expected to remain in agriculture for at least the next five years, but could be developed in the approximate five- to 15-year timeframe. Under the *Santa Clara County General Plan* the land is designated OPEN SPACE RESERVE, which is an interim designation for land for which the ultimate use has not been established. It is not possible to predict the type of future development that would occur on the site under the "No Project" scenario. The following analysis is based on the project site remaining in its current agricultural use for at least five years.



Source: California Automobile Association and EMC Planning Group Inc.

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Alternative Site Locations

Figure 26

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Agricultural Concerns

Under the "No Project" alternative, the land would remain in agricultural production. It is possible that the land would be developed within the 20-year time frame, consistent with its designation in the *City of Gilroy General Plan.* The "No Project" alternative is consistent with existing land use policies.

The "No Project" alternative is superior to the proposed project in terms of agricultural concerns.

Geology

There would be no geologic impacts under the "No Project" alternative.

The "No Project" alternative is slightly superior to the proposed project in terms of geologic hazards.

Hydrology

The "No Project" alternative would not result in the paving of pervious surfaces and would not increase storm water run-off or discharge of urban pollutants into surface waters. Some discharge of agricultural chemicals, fuels and oils is possible under the "No Project" alternative. These discharges are not known to occur currently on the project site, but are a potential occurrence with the current land use. Discharge of pollutants would be more of a concern with urban development than with the current use.

The "No Project" alternative is superior to the proposed project in terms of hydrology.

Biological Resources

The "No Project" alternative would retain the land surrounding the Uvas Creek riparian habitat in agricultural use. No construction activities would occur near the sensitive habitat areas, and no mitigation measures would be necessary. However, the proposed project would result in a widening of the habitat buffer from approximately 25 feet to a minimum 50 feet wide. This widening of the habitat buffer is a beneficial impact.

The proposed project is superior to the "No Project" alternative in terms of biological resources.

Transportation/Circulation

The "No Project" alternative would add no trips to the existing roadway conditions. The "No Project" alternative would have less impact on traffic than the proposed project.

The "No Project" alternative is the superior project in terms of traffic impacts.

Public Services

The project site currently receives its public services from Santa Clara County or from agencies other than the City of Gilroy. Under the "No Project" alternative Santa Clara County would continue to provide the same services at approximately the same level. The "No Project" alternative would have no impacts on public services.

The "No Project" alternative is the superior project in terms of public services.

Air Quality

The current agricultural land use periodically produces airborne particulate matter from farming operations. A minor amount of ozone precursors are emitted from the project site from the operation of vehicles and farm equipment. The proposed project would result in limited short-term emission of particulate matter and much greater long-term emissions of ozone precursors.

The "No Project" alternative is superior to the proposed project in terms of air quality.

Noise

The agricultural use of the land generates occasional low levels of noise from the operation of farm equipment and trucks. The proposed project would result in noise from automobiles accessing the project site and from athletic activities.

The "No Project" alternative is superior to the proposed project in terms of noise.

Archaeological Resources

Most farming operations disturb the soil to a relatively shallow depth. The current farming operations are not known to have unearthed any significant archaeological resources. Construction activities have the potential to disturb the soil to a greater extent than farming operations, and are more likely to unearth culturally significant buried resources.

The "No Project" alternative is superior to the proposed project in terms of archaeological resources.

Aesthetics

The project site currently presents a pastoral scene of farm fields against a backdrop of riparian vegetation. Under the "No Project" alternative, the land could be expected to remain in its current state for at least five years. The proposed project would introduce parking areas and lights that would detract from the scenic nature of the setting.

The "No Project" alternative is superior to the proposed project in terms of aesthetics.

Alternative #2 (Alternative Location A) Santa Teresa Boulevard at State Highway 152

The Alternative 2 site is comprised of five parcels located south State Highway 152 and to the west of Santa Teresa Boulevard in western Gilroy. The Assessor's parcel numbers are 810-21-002, 810-21-003, 810-21-004, 810-21-005 and 810-21-006. The total acreage of the site is 120.06 acres. Approximately one third of this total is located within the Uvas Creek channel or on the opposite side of the creek from the rest of the site, so the total usable area from a practical standpoint is approximately 80 acres. The site is bounded by Santa Teresa Boulevard on the east, State Highway 152 on the north, and private property on the west and south.

Uvas Creek flows from west to east through the southern third of the site. The site contains three rural residences and associated farm buildings, and greenhouses. The eastern half of the Alternative 2 site is within the Gilroy city limits and Urban Service Area and is designated RESIDENTIAL - RURAL, RESIDENTIAL MEDIUM DENSITY and RESIDENTIAL LOW DENSITY in the *City of Gilroy General Plan.*

A sports park with similar facilities to the proposed project would be built on the site.

Agricultural Considerations

Most of the usable land on the site is in agricultural production with row crops and tree crops. Land to the north and east of the site is predominantly urbanized, with some pockets of agricultural use and vacant land.

The usable land is identified on the *Santa Clara County Important Farmland Map* as Prime Farmland. None of the parcels on the Alternative 2 site is under Williamson Act contract. The eastern half of the site is within the Gilroy city limits.

Alternative 2 would result in approximately 50 fewer acres of prime farmland converted to non-agricultural use. Half of the site is already within the Gilroy city limits and Urban Service Area.

Alternative 2 is superior to the proposed project in terms of agricultural considerations.

Geology

There would be no unusual geologic impacts associated with Alternative 2.

Alternative 2 and the proposed project are approximately equal in terms of geologic hazards.

Hydrology

Uvas Creek flows through the southern third of the Alternative 2 site. The usable portions of the site are located in Flood Zone C, an area of minimal flooding. Though this site's location outside of a flood zone does not make it inappropriate for a sports park, a sports park can make very good use of land that is in a flood zone and otherwise limited in its usability. This consideration makes the sports park a desirable use of the project site.

Storm water run-off and surface water quality issues at this site would be similar to those at the project site.

Alternative 2 and the proposed project are approximately equal in terms of hydrology.

Biological Resources

Uvas Creek flows through the southern third of the Alternative 2 site, and is surrounded by similar habitat as at the project site. Biological resource issues at this site would be similar to those at the project site.

Alternative 2 and the proposed project are approximately equal in terms of biological resources.

Transportation/Circulation

The Alternative 2 site is located at the intersection of State Highway 152 and Santa Teresa Boulevard. West of the site, State Highway 152 is a winding two-lane mountain road connecting Gilroy to Watsonville. East of the site State Highway 152 follows two and four-lane city streets through downtown Gilroy to an interchange with U.S. Highway 101 at Tenth Street. Santa Teresa Boulevard is a predominately two-lane arterial. Santa Teresa Boulevard would provide a direct approach from the south if it were extended to U.S. Highway 101.

Approximately 30 percent of the sports park related traffic is expected to use U.S. Highway 101. The most direct access to the Alternative 2 site from U.S. Highway

101 is via the Tenth Street and Leavesley Road exits to Monterey Street and First Street (State Highway 152). An additional 40 percent of trips that would be expected to use Monterey Street or Church Street to reach the project site would likely use First Street to reach the Alternative 2 site.

Approximately 70 percent of the traffic to the Alternative 2 site would be expected to use First Street. The existing level of service at the intersection of State Highway 152 and Santa Teresa Boulevard is LOS C. The existing level of service at the intersection of First Street (State Highway 152) and Monterey Street is LOS B. Projected weekend mid-day levels of service at these intersections under cumulative conditions are LOS E and LOS F respectively, and with mitigation under cumulative conditions LOS C at both intersections (Robert Bein, William Frost and Associates 1997). Trips to the Alternative 2 site would use mostly the same roads as the project site, but would be concentrated on Monterey Street and First Street in built-out areas, where existing traffic levels are higher and physical roadway expansion possibilities are limited. The increase in traffic would be likely to result in significant traffic impacts to these intersections.

The existing western terminus of the Uvas Creek Trail is at Laurel Drive and Uvas Creek Drive, approximately one-quarter mile from the site. An underpass for the trail is proposed beneath Santa Teresa Boulevard, as is a western extension of the trail. Santa Teresa Boulevard has bicycle lanes. Bicycle and pedestrian access to the site would be good.

Because Alternative 2 would likely result in traffic impacts that would be difficult to mitigate, the proposed project is superior to Alternative 2 in terms of traffic impacts.

Public Services

Half of the Alternative 2 site is located outside the Gilroy city limits. Existing service conditions at those parcels are similar to those at the project site. The SSCCFD station at State Highway 152 and Burchell Road is located one mile west of the site. The other half of the site is within the Gilroy city limits and receives its public services from the City of Gilroy. Alternative 2 would have less impact on services than the proposed project. However, neither the proposed project nor Alternative 2 would have a significant impact on public services.

Alternative 2 and the proposed project are approximately equal in terms of public services.

Air Quality

Alternative 2 would result in the same number of trips as the proposed project.

Alternative 2 and the proposed project are approximately equal in terms of air quality.

Noise

Alternative 2 would generate the same amount of noise as the proposed project. The Alternative 2 site is equally isolated from surrounding residential uses as the proposed project and would not result in any significant impacts. The ambient noise level at the Alternative 2 site would be lower, but ambient noise did not present a significant impact at the project site.

Alternative 2 and the proposed project are approximately equal in terms of noise.

Archaeological Resources

The Alternative 2 site is located in an archaeologically sensitive area, as is the project site.

Alternative 2 and the proposed project are approximately equal in terms of archaeological resources.

Aesthetics

State Highway 152 and Santa Teresa Boulevard are both designated scenic roadways in the *City of Gilroy General Plan*. The sports park use would be appropriate in these scenic areas. The location has similar scenic qualities to the proposed site, though it is closer to the mountains and has a more remote feel than the project site. Nearby development is less dense than at the project site. The nighttime lighting would have a somewhat lesser impact on surrounding uses and a somewhat greater impact on the remote ambiance of the area.

Alternative 2 and the proposed project are approximately equal in terms of aesthetics.

Alternative #3 (Alternative Location B) Santa Teresa Boulevard and Miller Avenue

The Alternative 3 site is comprised of five parcels located between Miller Avenue and Santa Teresa Boulevard in western Gilroy. The assessor's parcel numbers are 808-18-014, 808-18-015, 808-18-016, 808-18-017 and 808-18-018. The total acreage of the site is 97.30 acres. The site is bounded by Santa Teresa Boulevard on the southwest, private land on the southeast, Miller Avenue on the east, and city-owned and private land on the north.

Approximately 90 percent of the Alternative 3 site has been used for field and tree crops, though no active agriculture is presently on-going. Along the northern edge of the site is a wooded area that includes a small reservoir. The City of Gilroy General Plan designation is RESIDENTIAL - LOW DENSITY. The site is zoned Limited Industrial and an industrial park was previously approved for the site. One

road is built into the site. The land to the west and south is undeveloped and Christmas Hill Park is located to the east of the site.

A sports park with similar facilities to the proposed project would be built on the site.

Agricultural Considerations

Most of the land on the site has been in agricultural production with field crops and tree crops, but the site is not currently in agricultural use. Some of the land is on wooded slopes and not farmable.

Approximately two-thirds of the farmable land is identified on the *Santa Clara County Important Farmland Map* as Prime Farmland, and approximately one-third is identified as Farmland of Local Importance, defined as "small orchards and vineyards primarily in the foothill areas; also land cultivated as dry cropland for grains and hay." None of the parcels on the Alternative 3 site is under Williamson Act contract. The site is within the Gilroy city limits.

Alternative 3 would result in approximately 50 fewer acres of prime farmland or farmland of local importance converted to non-agricultural use. The site is already within the Gilroy city limits and Urban Service Area.

Alternative 3 is superior to the proposed project in terms of agricultural considerations.

Geology

There would be no unusual geologic impacts associated with Alternative 3.

Alternative 3 and the proposed project are approximately equal in terms of geologic hazards.

Hydrology

Uvas Creek is located approximately one-quarter mile north of the Alternative 3 site. The site is located in Flood Zone C, an area of minimal flooding. Though this site's location outside of a flood zone does not make it inappropriate for a sports park, a sports park can make very good use of land that is in a flood zone and otherwise limited in its usability. This is a consideration that makes the sports park a desirable use of the project site.

Storm water run-off and surface water quality issues at this site would be similar to those at the project site.

Alternative 3 and the proposed project are approximately equal in terms of hydrology.

Biological Resources

Several wooded areas are located on the Alternative 3 site. Oak woodland is the predominate habitat at the Alternative 3 site. A small reservoir is located on the site. Preserved natural areas are located north and east of the site. Biological resource issues at this site would be similar to those at the project site.

Alternative 3 and the proposed project are approximately equal in terms of biological resources.

Transportation/Circulation

The Alternative 3 site is located north of the intersection of Santa Teresa Boulevard and Miller Avenue. Existing access to the site is from Miller Avenue. The City of Gilroy parcel map shows street rights-of-way connecting the site to Santa Teresa Boulevard as well. Santa Teresa Boulevard is a predominately two-lane arterial. Santa Teresa Boulevard would provide a direct approach from the south if it were extended to U.S. Highway 101. Miller Avenue is a two-lane collector.

Approximately 30 percent of the sports park related traffic is expected to use U.S. Highway 101. The most direct access to the Alternative 3 site from U.S. Highway 101 is via the Tenth Street to Uvas Park Drive and Miller Avenue. An additional 20 to 40 percent of trips that would be expected to use Monterey Street or Church Street to reach the project site would likely use Uvas Park Drive and Miller Avenue to reach the Alternative 3 site. The remaining traffic would likely use Santa Teresa Boulevard to reach the site

Half or more of the traffic to the Alternative 3 site would use Uvas Park Drive (classified in the *City of Gilroy General Plan* as a collector street) and Miller Avenue (not classified in the *City of Gilroy General Plan*). Increases in traffic on these relatively minor streets would be likely to result in significant traffic impacts at intersections along Uvas Park Drive and Miller Avenue. Impacts would be especially severe during the Gilroy Garlic Festival at adjacent Christmas Hill Park, although shuttle service is provided for the festival from remote parking lots. Trips to the Alternative 3 site would be concentrated on Tenth Street and Uvas Park Drive both relatively minor roads and would likely result in traffic impacts to intersections along these roads.

The Uvas Creek Trail passes within approximately one-quarter mile of the site. Santa Teresa Boulevard has bicycle lanes. Bicycle access to the site would be good, but the site is relatively isolated for good pedestrian access.

Because access to the Alternative 3 site would likely result in traffic impacts to relatively minor streets, (Uvas Park Drive and Miller Avenue) the proposed project is the superior project in terms of traffic impacts.

Public Services

The Alternative 3 site is located within the Gilroy city limits and receives its services from the City of Gilroy. The recycled water distribution line currently serves the site. Alternative 3 would have less impact on services than the proposed project. However, neither the proposed project nor Alternative 3 would have a significant impact on public services.

Alternative 3 and the proposed project are approximately equal in terms of public services.

Air Quality

Alternative 3 would result in the same number of trips as the proposed project.

Alternative 3 and the proposed project are approximately equal in terms of air quality.

Noise

Alternative 3 would generate the same amount of noise as the proposed project. The Alternative 3 site is more isolated from surrounding residential uses, however neither the proposed project nor Alternative 3 would result in any significant impacts. The ambient noise level at the Alternative 3 site would be similar to the project site, but ambient noise did not present a significant impact at the project site.

Alternative 3 and the proposed project are approximately equal in terms of noise.

Archaeological Resources

The Alternative 3 site is located in an archaeologically sensitive area, as is the project site.

Alternative 3 and the proposed project are approximately equal in terms of archaeological resources.

Aesthetics

Santa Teresa Boulevard is a designated scenic roadway in the *City of Gilroy General Plan*. The sports park use would be appropriate in this scenic area. The location has similar scenic qualities to the proposed site, though it is adjacent to larger areas of parkland than the project site. Nearby development is less dense than at the project site. The nighttime lighting would have a somewhat lesser impact on surrounding uses and a somewhat greater impact on the remote ambiance of the area.

Alternative 3 and the proposed project are approximately equal in terms of aesthetics.

Alternative #4 (Alternative Location C) Monterey Road at Bolsa Road

The Alternative 4 site is comprised of three parcels located north and east of Monterey Road and Bolsa Road in southern Gilroy. The assessor's parcel numbers are 841-31-003, 841-31-019 and 841-31-022. The total acreage of the site is 103.03 acres. The site is bounded by Monterey Road on the southwest, Bolsa Road on the south, Carnadero Avenue on the southeast, the Union Pacific Railroad on the northeast and private property on the northwest.

The Alternative 4 site is in agricultural production with field crops and row crops. The land to the west and south and east is undeveloped. The land to the north is commercial industrial. The site is outside the Gilroy city limits but within the Urban Service Area. The site is designated OPEN SPACE in the *City of Gilroy General Plan.*

A sports park with similar facilities to the proposed project would be built on the site.

Agricultural Considerations

The land on the Alternative 4 site is in agricultural production with field crops and row crops. The land to the west and south and east is undeveloped.

The land is identified on the *Santa Clara County Important Farmland Map* as Prime Farmland. The land is adjacent to extensive areas of Prime Farmland and to the Gilroy Agricultural Lands Area. None of the parcels on the Alternative 4 site is under Williamson Act contract. The site is outside the Gilroy city limits but within the Urban Service Area.

Alternative 4 would result in approximately 30 fewer acres of prime farmland converted to non-agricultural use. The site is currently within the Gilroy Urban Service Area. However, even though the land is outside the Gilroy Agricultural Lands Area, it is part of an extensive contiguous area of prime farmland, adjacent to the preserve area. Contiguous areas of farmland are considered to have greater value as farmland than noncontiguous areas. These factors considered together make the two sites approximately equal in terms of their impact on agricultural resources.

Alternative 4 and the proposed project are approximately equal in terms of agricultural considerations.

Geology

There would be no unusual geologic impacts associated with Alternative 4.

Alternative 4 and the proposed project are approximately equal in terms of geologic hazards.

Hydrology

Uvas Creek is located approximately one-quarter mile south of the Alternative 4 site, across Bolsa Road. The site is located in Flood Zone C, an area of minimal flooding. Though this site's location outside of a flood zone does not make it inappropriate for a sports park, a sports park can make very good use of land that is in a flood zone and otherwise limited in its usability. This consideration makes the sports park a desirable use of the project site.

Storm water run-off and surface water quality issues at this site would be similar to those at the project site.

Alternative 4 and the proposed project are approximately equal in terms of hydrology.

Biological Resources

The Alternative 4 site is entirely agricultural and would not support any significant biological resources. There would be no significant environmental impacts on biological resources on the Alternative 4 site.

Alternative 4 is superior to the proposed project in terms of biological resources.

Transportation/Circulation

The Alternative 4 site is located south of the U.S. Highway 101 and Monterey Road interchange on Bolsa Road. Bolsa Road is the southern extension of Monterey Road. It is currently a two-lane rural road south of the freeway ramps.

Approximately 30 percent of the sports park related traffic is expected to use U.S. Highway 101. The remaining traffic would likely use a variety of surface streets to reach Monterey Road and Bolsa Road.

There are no bicycle or pedestrian facilities serving the site. While bicycle lanes could be provided to the site, the site's distance from residential areas makes pedestrian access unlikely.

Alternative 4 and the proposed project are approximately equal in terms of traffic impacts.

Public Services

The Alternative 4 site is located outside the Gilroy city limits and currently receives its public services from Santa Clara County or from agencies other than the City of Gilroy. Alternative 4 would result in the same impacts to public services as the proposed project. Neither the proposed project nor Alternative 4 would have a significant impact on public services.

Alternative 4 and the proposed project are approximately equal in terms of public services.

Air Quality

Alternative 4 would result in the same number of trips as the proposed project.

Alternative 4 and the proposed project are approximately equal in terms of air quality.

Noise

Alternative 4 would generate the same amount of noise as the proposed project. The Alternative 4 site is more isolated from surrounding residential uses, however neither the proposed project nor Alternative 4 would result in any significant impacts. The ambient noise level at the Alternative 4 site would be similar to the project site, but ambient noise did not present a significant impact at the project site.

Alternative 4 and the proposed project are approximately equal in terms of noise.

Archaeological Resources

The Alternative 4 site is located in an archaeologically sensitive area, as is the project site.

Alternative 4 and the proposed project are approximately equal in terms of archaeological resources.

Aesthetics

The Alternative 4 site has similar scenic qualities to the proposed site, though it is not adjacent to any residential areas. Nearby development is sparse. The nighttime lighting would have a somewhat lesser impact on surrounding uses and a somewhat greater impact as viewed from a distance. The lighting would tend to be more noticeable in a location separated from the rest of the illuminated urban area.

Alternative 4 and the proposed project are approximately equal in terms of aesthetics.

Evaluation of Alternatives

CEQA Guidelines section 15126.6 (d) requires the EIR to present enough information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the

significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.

CEQA Guidelines section 15126.6(e) requires the selection of an environmentally superior alternative. If the "No Project " alternative is the environmentally superior alternative, then the environmentally superior alternatives amongst the remaining alternatives must be identified.

The "No Project " alternative is the environmentally superior alternative, because it eliminates the unavoidable significant impact of loss of prime farmland. The remaining alternatives and the proposed project are all approximately equal in terms of their environmental impacts, and the selection of one alternative as the environmentally superior is based on very fine shades of interpretation.

Though very close to the other remaining alternatives and the proposed project in terms of its environmental effects, Alternative 3 (Alternative Location B–Santa Teresa Boulevard and Miller Avenue) is the environmentally superior alternative among the remaining alternatives. The principal factor that favors Alternative 3 is its reduced impact on prime farmland compared to Alternatives 2 and 4.

Other factors on which the alternatives vary to any significant degree are biological resources, traffic and land use. The biological resource impacts are easily mitigated to a less than significant level. Traffic impacts associated with Alternative 3 are approximately the same as Alternative 2, though greater than Alternative 4. Alternative 4 is more remote from existing urban development and closer to large areas of contiguous farmland than the other locations and less appropriate from that standpoint.

The relative environmental merits of each alternative are summarized below. The environmentally superior alternative is identified. Table 17 summarizes the environmental effects of each alternative as well as the proposed project. Table 18 compares the relative environmental impacts of each alternatives to the proposed project.

TABLE 17

Summary of Environmental Effects of Proposed Project and Alternatives

Environmental Issue	Proposed Project	Alternative 1 "No Project"	Alternative 2 "Santa Teresa/ State Hwy 152"	Alternative 3 "Santa Teresa/ Miller"	Alternative 4 "Monterey/ Bolsa"
Agricultural Considerations	Significant Unavoidable	No Impact	Significant Unavoidable	Significant Unavoidable	Significant Unavoidable
Geology	Less Than Significant	No Impact	Less Than Significant	Less Than Significant	Less Than Significant
Hydrology	Mitigated to Less Than Significant	No Impact	Mitigated to Less Than Significant	Mitigated to Less Than Significant	Mitigated to Less Than Significant
Biological Resources	Mitigated to Less Than Significant	No Impact	Mitigated to Less Than Significant	Mitigated to Less Than Significant	No Impact
Transportation / Circulation	Mitigated to Less Than Significant	No Impact	Potentially Significant Mitigation may be Required	Potentially Significant Mitigation may be Required	Mitigated to Less Than Significant
Public Services	Less Than Significant	No Impact	Less Than Significant	Less Than Significant	Less Than Significant
Air Quality	Mitigated to Less Than Significant	No Impact	Mitigated to Less Than Significant	Mitigated to Less Than Significant	Mitigated to Less Than Significant
Noise	Mitigated to Less Than Significant	No Impact	Mitigated to Less Than Significant	Mitigated to Less Than Significant	Mitigated to Less Than Significant
Archaeological Resources	Mitigated to Less Than Significant	No Impact	Mitigated to Less Than Significant	Mitigated to Less Than Significant	Mitigated to Less Than Significant
Aesthetics	Less Than Significant	No Impact	Less Than Significant	Less Than Significant	Less Than Significant

Source: EMC Planning Group Inc.

TABLE 18

Comparison of Environmental Effects of Alternatives to Proposed Project

Environmental Issue	Alternative 1 "No Project"	Alternative 2 "Santa Teresa/ State Hwy 152"	Alternative 3 "Santa Teresa/ Miller"	Alternative 4 "Monterey/ Bolsa"
Agricultural Considerations	Much Better	Slightly Better	Slightly Better	Similar
Geology	Slightly Better	Similar	Similar	Similar
Hydrology	Better	Similar	Similar	Similar
Biological Resources	Slightly Better	Similar	Similar	Much Better
Transportation/ Circulation	Much Better	Worse	Worse	Slightly Worse
Public Services	Slightly Better	Slightly Better	Better	Similar
Air Quality	Better	Similar	Similar	Similar
Noise	Better	Similar	Similar	Similar
Archaeological Resources	Slightly Better	Similar	Similar	Similar
Aesthetics	Better	Slightly Worse	Similar	Slightly Worse

Source: EMC Planning Group Inc.

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4.0 Bibliography and Project Team

4.1 Persons Contacted

Ms. Melissa Durkin, Planner II, City of Gilroy Community Development Department.

Mr. William Faus, Planning Director, City of Gilroy Community Development Department.

Mr. Robert Friedrick, Senior Appraiser, Santa Clara County Office of the Assessor.

Mr. William Headley, Jr., Facilities and Parks Development Manager, City of Gilroy.

Mr. Henry Hilken, Senior Transportation Planner, Bay Area Air Quality Management District.

Mr. Roger Maggio, Deputy Fire Marshall, City of Gilroy.

Mr. Derek McKee, Vice President, the beals group inc.

Ms. Kathy Sakahara, Human Resources Department, City of Gilroy.

Mr. Bryan Stice, Planner I, City of Gilroy Community Development Department.

Mr. Kirk Wheeler, P.E. Principal, Schaaf and Wheeler.

Mr. Bill Wren, Public Information Specialist, McDonald Observatory, University of Texas at Austin.

4.2 Literature Cited

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*Federal Emergency Management Agency. *Flood Insurance Rate Map (Panel 755)*. August 17, 1998.

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*United States Department of Agriculture Soil Conservation Service. *Soil Survey of Eastern Santa Clara Area, California.* September 1974. Washington, DC.

Documents marked with an asterisk may be viewed at the City of Gilroy Planning Division office at 7351 Rosanna Street, Gilroy CA. All documents are available for review at EMC Planning Group Inc., 99 Pacific Street, Suite 155F, Monterey, CA.

4.3 Project Team

EMC Planning Group Inc.

Teri Wissler, Planning Associate
Project Manager

Richard James, Planning Technician
Report Preparation and Graphics

Cara Galloway, Planner/Biologist
Biological Assessment

Archaeological Resource Management

Dr. Robert Cartier, Principal Investigator
Preliminary Archaeological Reconnaissance

Edward L. Pack Associates, Inc.

Fehr and Peers Associates, Inc.

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Appendix A

Notice of Preparation

Notice of Preparation

To: Responsible and Trustee Agencies

From: City of Gilroy Community Development Department
Planning Division

Subject: Notice of Preparation of a Draft Environmental Impact Report
Gilroy Sports Park and Urban Service Area Amendment Request

Location: The 133.2-acre project site is located immediately south of the City of Gilroy in unincorporated Santa Clara County, approximately 35 miles south of San Jose, 10 miles south of Morgan Hill, and 30 miles northeast of Salinas. Figure 1 illustrates the regional location.

The project site is located at the south end of town at the southwest corner of Monterey Road and Thomas Road—Luchessa Avenue. It is bordered by Thomas Road—Luchessa Avenue to the north, Uvas Creek and Farman Lane to the south, Monterey Road and Monterey Frontage Road to the east, and Uvas Creek to the west. Surrounding land uses are residential (single-family), commercial (hotels under construction), and agricultural (row crops). U.S. Highway 101 is located approximately 300 feet from the south end of the site, to approximately 1,100 from the north end of the site. Figure 2 illustrates the project vicinity.

The City of Gilroy will be the Lead Agency and will prepare an Environmental Impact Report for the project identified in this notice of preparation. In connection with the proposed project, we need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibility.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice. Please respond by November 23, 1998.

Please send your response to Bryan Stice at the City of Gilroy Planning Division. We will need the name of a contact person in your agency.

Date: _____ Signature: _____
Title: Planner I

Project Description

Existing Conditions

The entire 133.2-acre project site is located in unincorporated Santa Clara County, immediately south of both the city limits of Gilroy and the Urban Service Area limits. The site is currently in agricultural row-crop production. Three rural residences are located along the site's eastern boundary on Monterey Frontage Road. Uvas Creek is located at the western boundary and a portion of the southern boundary. A flood-control levee was constructed on a portion of the site. The levee extends from ten feet landward of the levee toe, to the bank of the channel. It extends approximately 1,100 feet (on-site) south of Thomas Road—Luchessa Avenue to 4,500 feet upstream (and off-site) to Miller Avenue.

The City of Gilroy general plan land use designations for the project site is open space and park/public facility. General plan land use designations surrounding the site include residential (east and north), general services (east and north), visitor serving (east), and open space (west).

Proposed Conditions

The proposed project consists of three components: an Urban Service Area Amendment request to Santa Clara County LAFCo; development of the Gilroy Sports Park; and construction of off-site improvements including extension of the Uvas Creek Trail north to Thomas Road—Luchessa Avenue, and south to Gavilan College (including a pedestrian/bicycle bridge), extension of the city's recycled water distribution line to the sports park, and roadway improvements.

Urban Service Area Amendment Request

The entire 133.2-acre site is proposed for inclusion into the city' s Urban Service Area. This would include the 78.4-acre sports park site and 54.8 acres of adjacent parcels. Figure 3 identifies the project site and it's relation to the existing Urban Service Area. Table 1 includes identification of affected parcels.

The sports park is the only project proposed for development at this time within the Urban Service Area Amendment request. A small portion of the sports park site is located adjacent to the existing Urban Service Area boundary along Monterey Frontage Road. However, in an effort to not create an "island", the city has included the adjacent parcels to the north and east in the Urban Service Area Amendment request. The adjacent parcels' general plan land use designation of open space will not be modified as part of this project.

TABLE 1

Assessor's Parcels

Project Component	Assessor's Parcel Number	Acres
Sports Park Area	808-21-030	26.269
	808-21-028	31.53
	808-21-026	20.56
Additional Area	808-21-021	7.00
	808-21-018	0.87
	808-21-016	26.05
	808-21-008	0.10
	808-21-009	0.70
	808-21-031	7.42
	808-21-029	4.70
	808-21-027	6.20
	808-21-013	4.51
	808-21-014	1.35
	808-21-015	32.95
Total		133.209

Source: City of Gilroy

Gilroy Sports Park

The sports park preliminary master plan is presented in Figure 4. The *Gilroy Sports Complex Draft Master Plan*, prepared by Beals Landscape Architecture, Inc. in May 1998, is available for public review at the City of Gilroy Community Services Department. Preliminary plan components include the following: recreational play fields (eight softball diamonds and four soccer fields and concession/restrooms); premier play fields (one 90-foot baseball diamond, two little leagues diamonds and one soccer field and concession/restrooms); competition play fields (one softball/baseball diamond and one soccer field and concession/restrooms); 8.8 acres of park preserve with volleyball, family picnic, concessions/restrooms, bocce ball courts, and play area; commercial recreation (indoor soccer, roller hockey, community building, storage); corporation yard; parking (1,043 spaces); and a night watch park ranger station. Soccer fields overlay baseball/softball fields. Football may also be played on the soccer fields.

The preliminary master plan also includes the following: a habitat buffer zone, measured from 50 feet from top of bank, along Uvas Creek to be enhanced with

native plantings; a six-foot perimeter fence; walking/bicycle paths throughout the site; entry gates and an entry building at the Monterey Frontage entrance; and the extension of the Uvas Creek Trail from Thomas Road—Luchessa Avenue through the site and continuing on to the south. The trail extension will cross Uvas Creek via a pedestrian/bicycle bridge at the southern boundary where it will eventually continue south to connect with Gavilan College.

Off-Site Improvements

Off-site improvements include the extension of the Uvas Creek Trail north to Thomas Road—Luchessa Avenue, and south to Gavilan College; extension of the city's recycled water distribution line to the sports park; and roadway improvements.

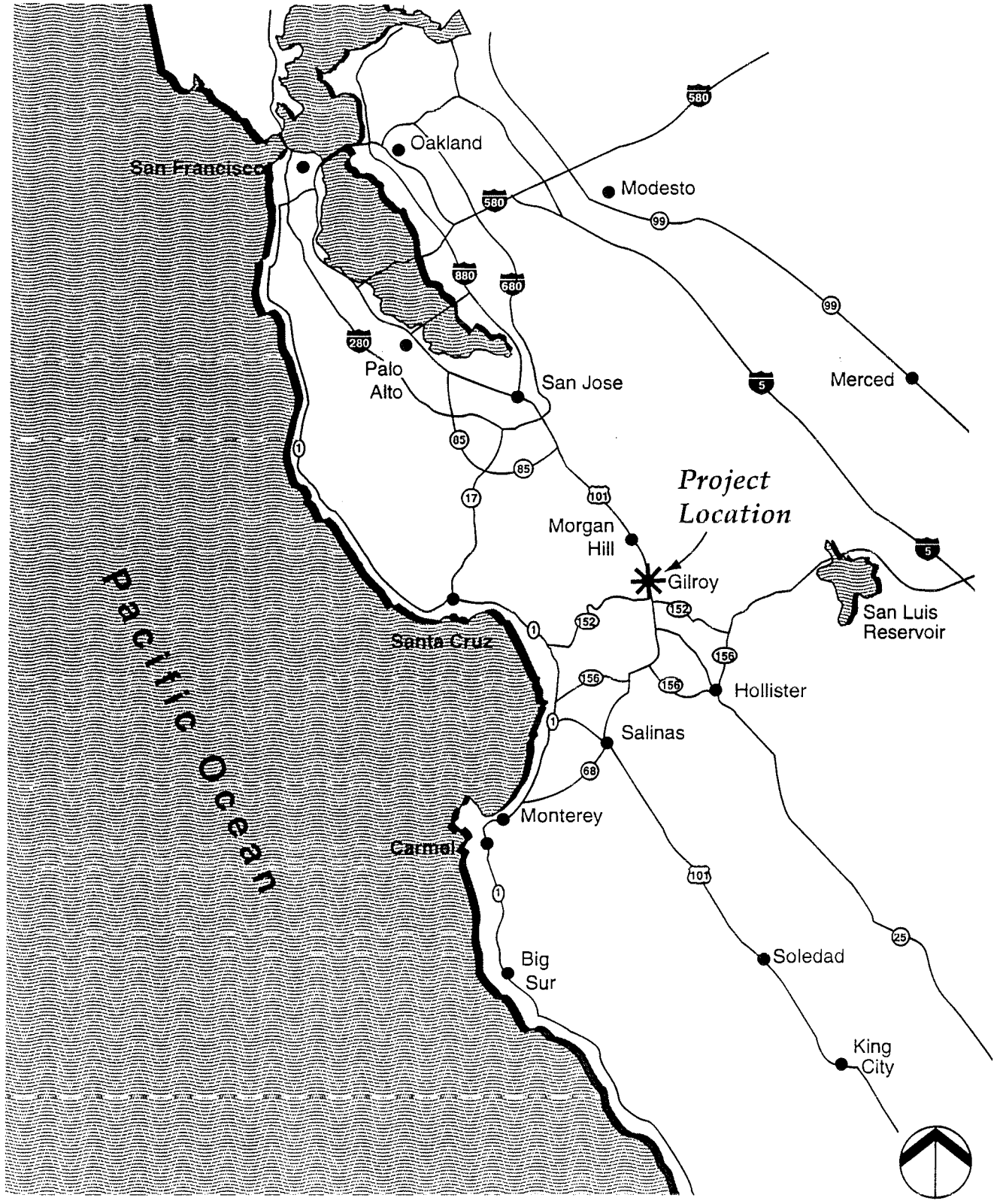
Uvas Creek Trail Extension. The proposed Uvas Creek Trail Extension is illustrated in Figure 5. The project's trail system will connect to the existing Uvas levee trail, which ends just past Thomas Road—Luchessa Avenue, to the Gavilan College area. A bridge crossing is proposed at the central, southern portion of the project site. The trail then continues south to Mesa Road where the trail system would turn east into the Gavilan College campus.

Recycled Water Distribution Line. The city would extend a recycled water distribution line to serve the landscape needs of the sports park.

Roadway Improvements. To enable pedestrian traffic, a six-foot wide sidewalk is proposed southward from the Thomas Road—Luchessa Avenue/Monterey Road intersection to the Monterey Frontage Road. There would also be a crosswalk at the Monterey Frontage Road, with appropriate project signs and introduction to the sports park. The crosswalk and intersection of Monterey Road and Monterey Frontage Road would be signalized in the future. This improvement would be based on a demand and use level with traffic/circulation for the sports park. The sidewalk would then continue down the Monterey Frontage Road and into the park itself. The sidewalk would be buffered from the road with a parkway strip consisting of shade trees and accent planting.

Phasing

The sports park will be developed in approximately nine phases. The proposed phasing plan is illustrated in Figure 6. Phases are being proposed in sequence of construction from the entrance to the west end of the site for Phases One through Seven. Phases Eight through Nine can occur at any time, and have been separated based on that area being able to be constructed independently of the other phases.



Source: California State Automobile Association and EMC Planning Group Inc.

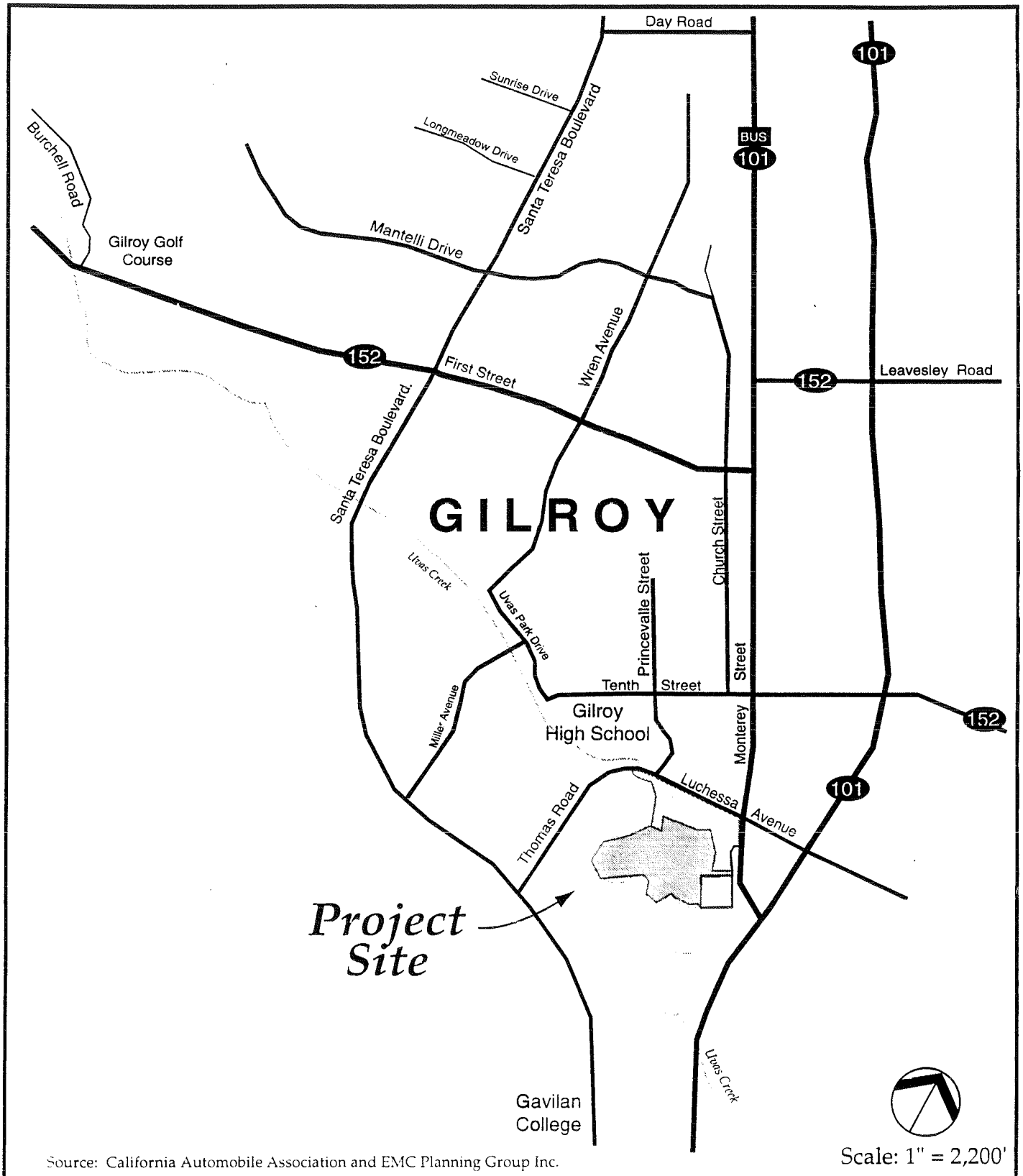
No Scale

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy Sports Park and USA Amendment EIR NOP

Regional Location

Figure 1



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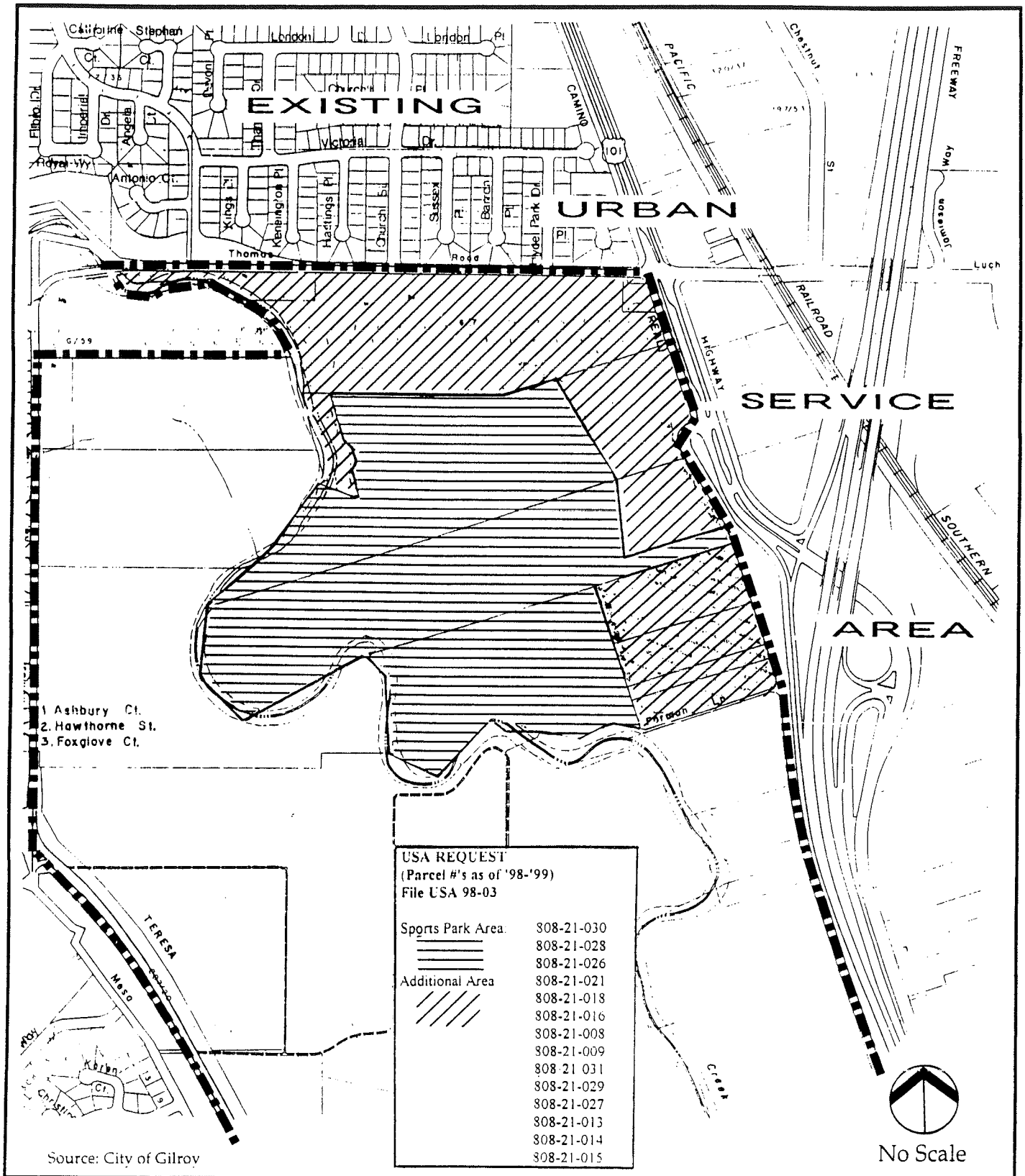
A Land Use Planning and Design Firm

Gilroy Sports Park and USA Amendment EIR NOP

Project Vicinity

Figure 2



EMC Planning Group Inc.
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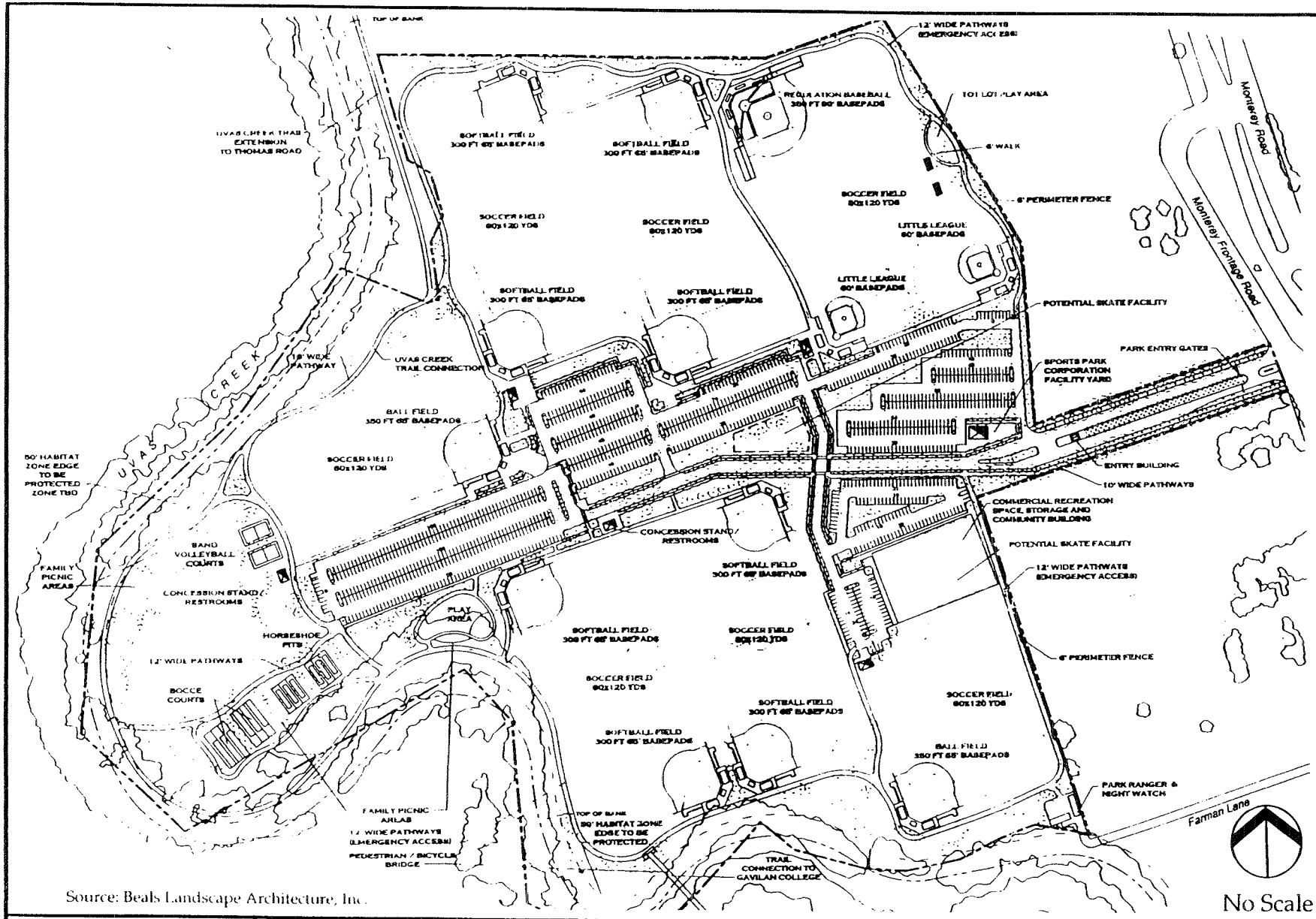
Gilroy Sports Park and USA Amendment EIR NOP

Project Site and Relation to Existing Urban Service Area

Figure 3



Source: Beals Landscape Architecture, Inc.

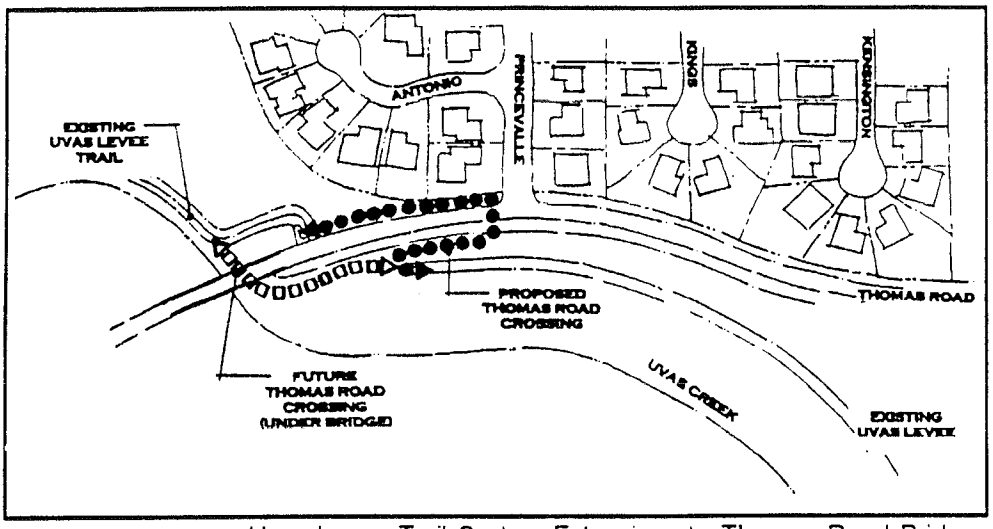
EMC Planning Group Inc.

A Land Use Planning and Design Firm

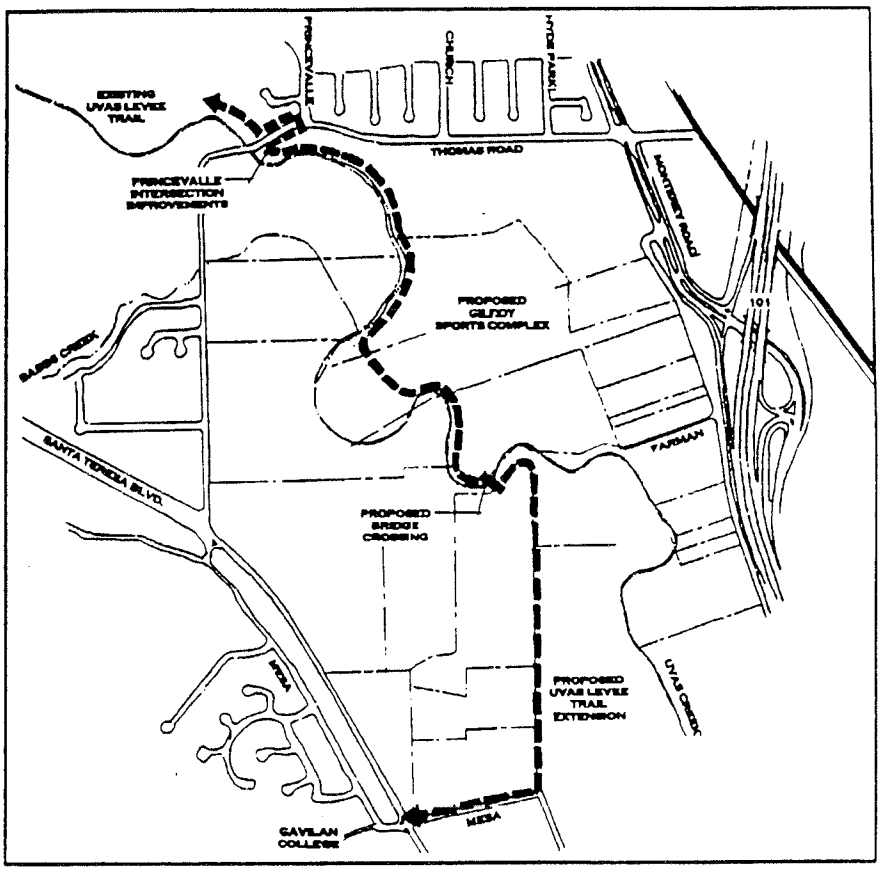
Gilroy Sports Park and USA Amendment EIR NOP

Preliminary Master Plan

Figure 4



Uvas Levee Trail System Extension to Thomas Road Bridge



Uvas Levee Trail System Extension to Gavilan College

No Scale

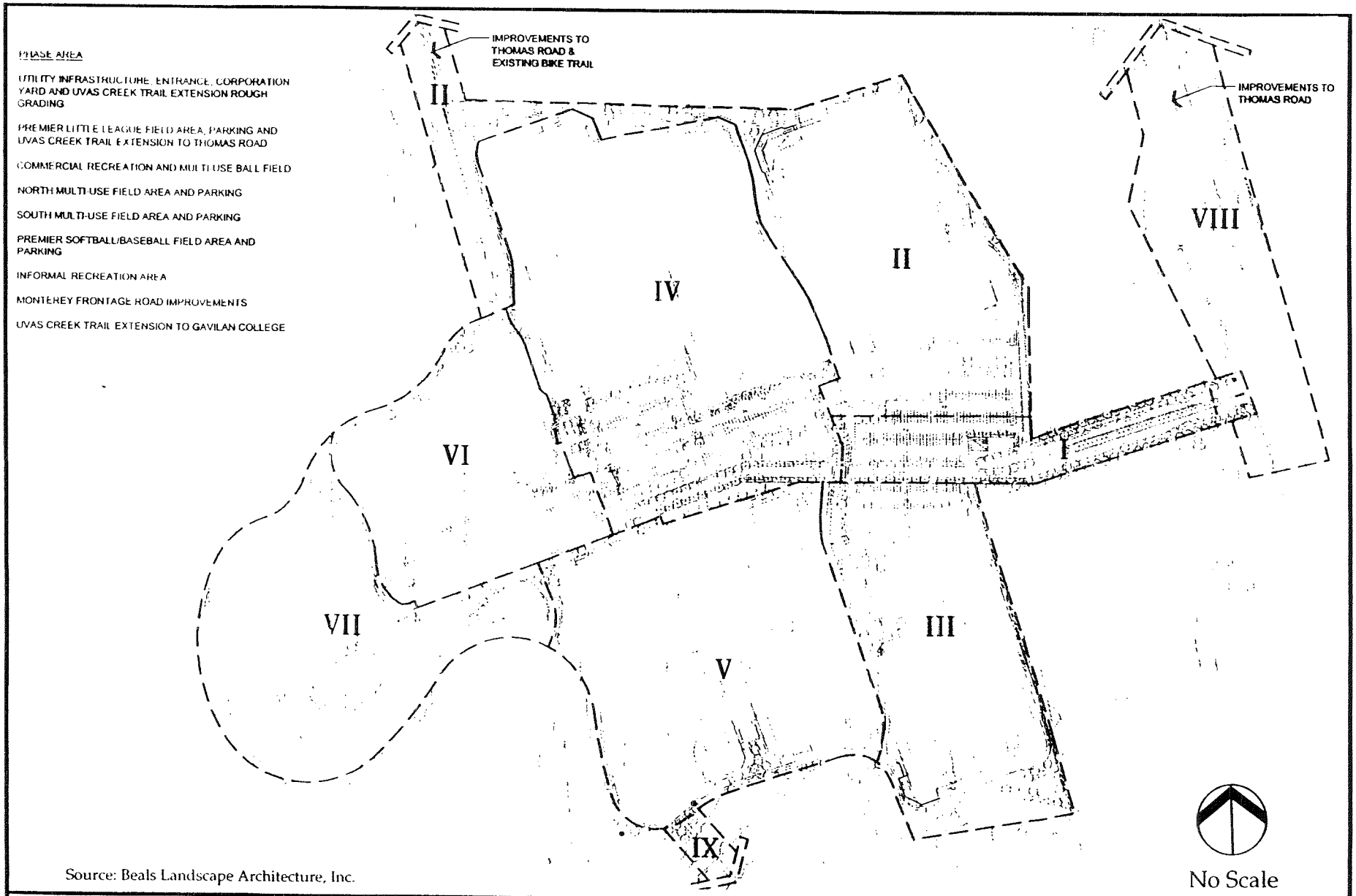
Source: Beals Landscape Architecture, Inc.

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy Sports Park and USA Amendment EIR NOP

Uvas Creek Trail Extension

Figure 5



Source: Beals Landscape Architecture, Inc.

No Scale

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy Sports Park and USA Amendment EIR NOP

Phasing Plan

Figure 6

CITY OF GILROY
7351 Rosanna Street
Gilroy, California 95020
(408) 848-0440

Initial Study

I. BACKGROUND

Project Name:	Gilroy Sports Park and Urban Service Area Amendment Request
Project Location:	At the southwest corner of Thomas Road—Luchessa Avenue and Monterey Road, south of the city limits of Gilroy and south and west of the existing Urban Service Area boundaries.
File No:	USA 98-03
Date Prepared:	September 29, 1998
Study Prepared By:	EMC Planning Group Inc. P.O. Box 414, Monterey, California 93942 (408) 649-1799
Name of Applicant:	City of Gilroy
Assessor's Parcel Number(s):	See attached project description
Acreage of Property:	See attached project description
Zoning:	None
General Plan Designation:	Open Space and Park/Public Facility

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact

II. ENVIRONMENTAL IMPACTS

1. LAND USE AND PLANNING. Would the proposal:

a) Conflict with general plan designation or zoning? (1, 2, 15, 16a, 16b)	❑	❑	❑	✓
b) Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project? (1, 2, 3, 4, 5)	❑	✓	❑	❑
c) Be incompatible with existing land use in the vicinity? (7, 15)	❑	❑	❑	✓
d) Affect agricultural resources or operations (e.g. impacts to soils or farmlands, or impacts from existing adjacent farming activities)? (7, 16i)	✓	❑	❑	❑
e) Disrupt or divide the physical arrangement or an established community? (7, 15)	❑	❑	❑	✓

2. POPULATION AND HOUSING. Would the proposal:

a) Cumulatively exceed official regional or local population projections? (1, 2, 15, 16a, 16b)	❑	❑	❑	✓
b) Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)? (1, 2, 3, 4, 5, 7)	❑	✓	❑	❑
c) Displace existing housing, especially affordable housing? (7, 15)	❑	❑	❑	✓

3. GEOLOGIC PROBLEMS. Would the proposal result in or expose people to potential impacts involving:

a) Fault rupture? (16j)	❑	❑	❑	✓
b) Seismic ground shaking? (16j, 17)	❑	❑	✓	❑
c) Seismic ground failure, including liquefaction? (16j, 17)	❑	✓	❑	❑
d) Landslides or mudflows? (16j)	❑	❑	❑	✓

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill? (6,7)	❑	❑	❑	✓
f) Expansive soils, i.e., shrink-swell potential ? (6, 17)	❑	✓	❑	❑
g) Unique geologic or physical features? (7)	❑	❑	❑	✓
4. WATER. Would the proposal result in:				
a) Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff? (3, 7, 15, 17)	❑	✓	❑	❑
b) Exposure of people or property to flooding? (15, 16f)	❑	✓	❑	❑
c) Discharge into surface waters or other alteration of surface water quality? (7, 15, 17)	❑	❑	✓	❑
d) Changes in the amount of surface water in any water body? (3, 15)	❑	❑	❑	✓
e) Changes in currents, or the course or direction of water movements? (3, 15)	❑	❑	❑	✓
f) Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations, or through substantial loss of groundwater recharge capability? (15)	❑	❑	❑	✓
g) Altered direction or rate of flow of groundwater? (15)	❑	❑	❑	✓
h) Impacts to groundwater quality? (15)	❑	❑	❑	✓
i) Substantial reduction in the amount of groundwater available for public water supplies? (15)	❑	❑	❑	✓
5. AIR QUALITY. Would the proposal:				
a) Violate any air quality standard or contribute to an existing or projected air quality violation? (10)	❑	❑	✓	❑
b) Expose sensitive receptors to pollutants? (17)	❑	✓	❑	❑

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Alter air movement, moisture, or temperature, or cause any change in climate? (15)	❑	❑	❑	✓
d) Create objectionable odors? (15)	❑	❑	❑	✓
6. TRANSPORTATION/CIRCULATION. Would the proposal result in:				
a) Increased vehicle trips or traffic congestion? (1, 15)	❑	✓	❑	❑
b) Hazards to safety from design features (e.g. sharp curves or dangerous intersection) or incompatible uses (e.g. farm equipment)?(7, 15)	❑	❑	✓	❑
c) Inadequate emergency access or access to nearby uses? (15)	❑	❑	❑	✓
d) Insufficient parking capacity on-site or off-site? (2, 15)	❑	❑	❑	✓
e) Hazards or barriers for pedestrians or bicyclists? (15)	❑	❑	❑	✓
f) Conflicts with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks)? (1,15)	❑	❑	❑	✓
g) Rail or air traffic impacts? (15)	❑	❑	❑	✓
7. BIOLOGICAL RESOURCES. Would the proposal result in impacts to:				
a) Endangered, threatened, or rare species or their habitats? (7)	❑	✓	❑	❑
b) Locally designated species (e.g. oaks) (7)	❑	❑	❑	✓
c) Locally designated natural communities (e.g. oak forest) (7)	❑	❑	❑	✓
d) Wetland habitat (e.g. marsh, riparian, and vernal pool)? (7)	❑	✓	❑	❑
e) Wildlife dispersal or migration corridors? (7)	❑	✓	❑	❑

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
8. ENERGY. Would the proposal:				
a) Conflict with adopted energy conservation plans? (15)	❑	❑	❑	✓
b) Use non-renewable resources in a wasteful and inefficient manner? (15)	❑	❑	❑	✓
9. HAZARDS. Would the proposal involve:				
a) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals, or radiation)? (7, 15)	❑	❑	❑	✓
b) Possible interference with an emergency response plan or emergency evacuation plan? (15)	❑	❑	❑	✓
c) The creation of any health hazard or potential health hazard? (7, 15)	❑	❑	❑	✓
d) Exposure of people to existing sources of potential health hazards? (7, 15, 17)	❑	❑	✓	❑
e) Increase fire hazard in area with flammable brush,grass, or trees? (7, 15)	❑	❑	❑	✓
10. NOISE. Would the proposal result in:				
a) Increases in existing noise levels? (7, 15, 17)	❑	✓	❑	❑
b) Exposure of people to severe noise levels? (7, 15)	❑	❑	❑	✓
11. PUBLIC SERVICES. Would the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:				
a) Fire protection? (1, 15)	❑	❑	✓	❑
b) Police protection? (1, 15)	❑	❑	✓	❑
c) Schools? (1, 15)	❑	❑	❑	✓
d) Parks and Recreation Facilities? (1, 15)	❑	❑	❑	✓

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
12. UTILITIES AND SERVICE SYSTEMS. Would the proposal result in a need for new systems or supplies, or substantial alterations to the following utilities:				
a) Power or natural gas? (1, 15)	❑	❑	❑	✓
b) Communications systems (1, 15)	❑	❑	❑	✓
c) Water treatment or distribution facilities? (1, 15)	❑	❑	✓	❑
d) Sewer or septic tanks? (1, 4, 15)	❑	❑	❑	✓
e) Storm water drainage? (1, 3, 15)	❑	✓	❑	❑
f) Local or regional water supplies? (1, 15)	❑	❑	✓	❑
13. AESTHETICS. Would the proposal:				
a) Affect a scenic vista or scenic highway? (1)	❑	❑	✓	❑
b) Have a demonstrable negative aesthetic effect? (7, 15)	❑	❑	❑	✓
c) Create light or glare? (7, 15)	❑	✓	❑	❑
14. CULTURAL RESOURCES. Would the proposal:				
a) Disturb archaeological resources? (16h, 17)	❑	✓	❑	❑
b) Affect historical resources? (7)	❑	❑	❑	✓

INFORMATION REFERENCES

1. General Plan (City of Gilroy)
2. Zoning Ordinance (City of Gilroy)
3. Storm Drain Master Plan (City of Gilroy)
4. Sewer Master Plan (City of Gilroy)
5. Water Master Plan (City of Gilroy)
6. Soil Survey of Eastern Santa Clara County (U.S. Soil Conservation Service)
7. Field Inspection
8. Staff/Consultant Knowledge of Area
9. Santa Clara County Transportation Plan T2010
10. BAAQMD CEQA Guidelines, April 1996 (Table 6)
11. Site Specific Traffic Study
12. Site Specific Archaeological Study
13. Site Specific Noise Study
14. Site Specific Air Quality Impacts Study
15. Project Plans
16. Maps
    a. General Plan Land Use Map
    b. Zoning Map
    c. U.S.G.S. Topographic Quadrangle (7.5 Minute Series)
    d. Department of Fish and Game, Natural Diversity Data Base Map Overlays and Textual Reports
    e. Gilroy Slope Map (1" = 1,000') 1978-79 General Plan Revision Program
    f. FEMA Flood Insurance Rate Map (1" = 1,000')
    h. Gilroy Archaeological Sensitivity Map (1" = 1,000') April 30, 1980
    i. Santa Clara County Important Farmland Map (1" = 100,000') 1994
    j. Santa Clara County Relative Seismic Stability Map (Scale Unknown)
17. See attached discussion (Proposed EIR Scope of Work)

Note: This is an information reference list for all initial studies prepared within the City of Gilroy. Some of the references listed above may not have been utilized for this particular initial study.

Proposed EIR Scope of Work

The proposed EIR scope of work, which addressed the initial study checklist presented above, is as follows:

Consistency With Local and Regional Plans

This section will include a discussion of the proposed project's consistency with applicable local and regional plans. These plans include the City of Gilroy General Plan, the City of Gilroy Zoning Ordinance, Santa Clara County General Plan, applicable Santa Clara County LAFCo policies, and the Bay Area Air Quality Management District Air Quality Management Plan.

Land Use and Planning

Concern. The project site is currently in agricultural production and is considered prime farmland by the California Department of Conservation (Santa Clara County Important Farmland Map 1996). Loss of prime farmland is considered a significant, and generally unavoidable, adverse environmental impact.

Approach and Methodology. The scope of work will include the following tasks:

- Present the existing agricultural setting on the project site. Identify existing and proposed surrounding land uses.
- Discuss the project site's designation as prime farmland by the California Department of Conservation. Discuss the project site's soil properties as described in the U.S. Department of Agricultural Soil Conservation Service Soil Survey for Eastern Santa Clara County.
- Discuss the compatibility of the proposed project with existing, as well as proposed, surrounding land uses.
- Discuss how the proposed project is compatible with surrounding land uses.
- Present standards to determine significance.
- Identify the impacts associated with loss of prime farmland.
- Present feasible mitigation measures, if possible.
- Determine if impacts can be reduced to a less than significant level.

Water

Concern. The project site is located adjacent to Uvas Creek and the U.S. Army Corps of Engineers levee. The project site is located within a known flood zone.

Approach and Methodology. The scope of work will include the following tasks:

- Discuss flooding issues with lead agency staff, the Santa Clara Valley Water District, the U.S. Army Corps of Engineers, as well as other agencies and firms with knowledge or jurisdiction over the project site as it relates to flooding.

- Review previously prepared hydrological reports prepared for the project site and vicinity: Blocher General Plan Amendment Initial Study (1993) and the Blocher Property Hydrology and Drainage Report (1993), both of which were prepared by, or under contract to EMC Planning Group Inc. for the project site; the Update Insert Maps for this study (as noted in the August 13, 1998 memo to consultants from Bill Headley); and the Pajaro River Basin Uvas-Carnadero Creek, California General Design Memorandum Phase I Report.

- Present the existing surface water drainage patterns on the project site, as well as identification of the flood zone as presented on the FEMA Flood Insurance Rate Maps and study maps.

- Identify how the proposed project would change the existing surface water drainage patterns, if at all.

- Present standards to determine significance of impact.

- Identify significant flooding impacts associated with the proposed project.

- Present mitigation measures, as appropriate.

- Determine if impacts can be reduced to less than significant levels.

  Note: The city has hired a hydrological engineering firm, separate from preparation of the EIR, to design the project to meet the requirements of the Santa Clara Valley Water District.

Biological Resources

Concern. The project site is located adjacent to Uvas Creek, a significant biological resource. A narrow riparian corridor with an average width estimated to be approximately 25 feet, borders Uvas Creek. A mixture of evergreen and deciduous mature native trees forms a canopy over the northeast bank of the creek. The riparian understory is well developed at the top of the bank adjacent to the western and southern borders of the agricultural field. Adult steelhead migrate upstream to spawn in winter and early spring. The Uvas Creek watershed provides one of the most important steelhead spawning grounds in the Pajaro River system. Special-status plant and wildlife species have the potential to be located within the creek

and riparian corridor. The proposed project includes a 50-foot wide wildlife easement to include native plantings in an effort to widen the riparian corridor for Uvas Creek.

Approach and Methodology. In association with preparation of the Blocher General Plan Amendment Initial Study, a reconnaissance level biological survey of the project site was completed in January 1993. Several recommendations were made regarding future development of the project site in order to assure that impacts to the creek corridor were minimized. The consultant will conduct a field survey to update the 1993 survey, focusing on the potential change in status for special-status plant and wildlife species. In addition, the off-site improvements (roadway improvement and bike trail extension) will also be analyzed for their potential impacts to biological resources. The scope of work will include the following tasks:

- Conduct a field survey to verify the results of the 1993 survey and make any necessary adjustments to the status of special-status plants and wildlife species as determined by the California Department of Fish and Game (CDFG), the U.S. Fish and Wildlife Service, and the California Native Plant Society.

- Meet with lead agency staff and Beals Landscape Architecture, Inc. to discuss CDFG recommendations for the creek corridor. Meet CDFG to discuss the issues.

- Present the biological resources setting for the project site, as well as the areas for off-site improvements (roadway improvement and bike trail extension). Include vegetation maps and tables, as appropriate. Include a discussion of special-status plant and wildlife species.

- Discuss how the proposed project would change the existing biological setting.

- Present standards to determine significance of impact.

- Identify significant biological impacts associated with the proposed project.

- Review the previously presented recommendations in the Blocher General Plan Amendment Initial Study for their applicability with the proposed project.

- Present mitigation measures (including applicable previous recommendations and new mitigations), as appropriate.

- Determine if impacts can be reduced to less than significant levels.

Transportation/Circulation

Concern. The proposed project will increase vehicle trips/traffic congestion on the roadways in the vicinity of the project site. In addition, the potential for hazards or barriers for pedestrians and bicyclists will need to be evaluated. Project access and parking will need to be reviewed. The study intersections include Thomas Road—Luchessa Avenue/Princevalle Street and Monterey Road/Monterey Frontage Road.

Approach and Methodology. A traffic impact analysis, as set forth by both the City of Gilroy and the Santa Clara Valley Transportation Authority (VTA), will be prepared. The scope of work will include the following tasks:

- Collect data and evaluate existing conditions. Available traffic counts will be obtained from the lead agency and supplemented with new counts at the study intersections. According to lead agency staff, counts are available at both intersections for the weekday PM peak hour. New manual turning-movement counts will be conducted at the key intersection during the Saturday peak period. The peak period will be determined in consultation with lead agency staff, and a two hour count will be conducted at each intersection. Level of service calculations will be conducted using the TRAFFIX software package.

- Present the existing LOS conditions at the study intersections.

- Evaluate existing plus approved project conditions. A list of approved, but not yet constructed projects will be obtained from the lead agency. The associated traffic projections for all approved developments will be obtained from traffic reports prepared for the developments, or estimated using standard traffic engineering practices. Traffic from approved development will be added to existing volumes to obtain traffic estimates for existing plus approved project conditions.

- Evaluate proposed project conditions (phasing). Proposed project generated traffic will be estimated for the PM peak hour and the Saturday peak hour for up to five phases. Trip generation will be estimated based on the planned operation of the sports park. The park's operation will be discussed with the lead agency staff and Beals Landscape Architecture, Inc. Based on these discussions, the trip generation will be estimated and these estimates will be submitted to lead agency staff for review and approval. The project trips for each of the five scenarios will be added to traffic volumes estimated for background conditions to obtain traffic volumes for each phase of the project. (The analysis of Saturday peak hour conditions will be a worst case analysis: the traffic generated by the proposed project during the peak hour of the generator will be added to intersection volumes measured during the existing peak hour of the intersection).

Archaeological Resources

Concern. The project site is located in an archaeologically-sensitive area according to the Gilroy Archaeological Sensitivity Map, April 30, 1980. A preliminary archaeological reconnaissance consists of both a literature search and visual site survey (which does not include movement of the soil). Because of the highly "disturbed" nature of the project site (agricultural production and levee improvements), it would be unlikely, although not impossible, that any evidence of archaeological surface material exist. There is, however, the possibility that archaeological resources are buried beneath the project site.

Approach and Methodology. A preliminary archaeological reconnaissance will be conducted. The scope of work will include the following tasks:

- Conduct an archival background study of the cultural resources in and near the study area with the Northwest Information Center.
- Conduct a surface reconnaissance of the project area.
- Present existing site conditions.
- Present standards to determine significance of impact.
- Identify the potential for significant archaeological resources to be buried beneath the project site.
- Present the standard City of Gilroy mitigation measure requiring construction to halt in the event significant archaeological resources are uncovered, as well as any other mitigation measures that may be appropriate.
- Determine if impacts can be reduced to less than significant levels.

Aesthetics

Concern. The proposed project will introduce light into a previously undeveloped area, although located in proximity to an existing residential neighborhood. Night-time lighted ballfields could produce light and glare to the existing residential neighborhood, as well as on the surrounding street system. Visual impacts from Highway 101 and/or Monterey Road and Thomas Road—Luchessa Avenue are expected to be less than significant but need to be addressed.

Approach and Methodology. The scope of work will include the following tasks:

- Present the existing visual setting from the residential neighborhood north of Thomas Road—Luchessa Avenue; from Highway 101 and from Monterey Road.

- Identify the project components that will change the existing visual setting, as well as those that will introduce light and glare.
- Present standards to determine significance of impact.
- Identify the visual impacts associated with development and operation of the proposed project.
- Present mitigation measures, as appropriate.
- Determine if impacts can be reduced to less than significant levels.

Issues Determined to Have Less Than Significant Impacts

Several issues are anticipated to be determined to have a less than significant impact through preparation of the expanded notice of preparation (including the initial study). These include the following: population and housing, geologic problems, energy, hazards, public services, and utilities and service systems. These issues will be briefly discussed. If one of these issues surfaces as having a potentially significant impact, it will be addressed in greater detail.

Unavoidable Significant Adverse Environmental Impacts

In accordance with CEQA Guidelines §15126(b), any significant adverse environmental impacts, as identified through analysis discussed above, which cannot be avoided or substantially lessened if the project is implemented, will be discussed in this section.

Cumulative Impacts

In accordance with CEQA Guidelines §15130, cumulative impacts shall be discussed when they are significant. The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the impacts attributable to the proposed project alone.

Significant Irreversible Environmental Changes

In accordance with CEQA Guidelines §15126(f), this section will include a discussion of the significant irreversible environmental changes associated with implementation of the proposed project. Use of nonrenewable resources during the initial and continued phases of a proposed project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impact generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with proposed projects. Irretrievable

commitments of resources would be evaluated to assure that such consumption is justified.

Growth Inducing Impacts

In accordance with CEQA Guidelines §15126(g), this section will include a discussion of any methods by which the proposed project will directly or indirectly induce economic, population, or housing growth. "Growth inducing" generally refers to the likelihood that a proposed project will foster growth in the surrounding area, either directly or indirectly. The most common factor in fostering growth is the removal of obstacles to population or economic growth.

Alternatives

In accordance with CEQA Guidelines §15126(d), this section will describe a range of reasonable alternatives to the proposed project or to the location of the proposed project, which could feasibly attain the basic objectives of the proposed project. The following alternatives are being considered:

1. No Project Alternative. As required by CEQA Guidelines § 15126(d)(4), the no project alternative shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the proposed project were not approved, based on current plans and consistent with available infrastructure and community services.

2. Project Redesign to Reduce Environmental Impacts (if possible)

3. Alternative Location(s). Staff is reviewing several potential alternative locations for analysis in the EIR.

The scope of work for this section is as follows:

- Describe each of the alternatives to be analyzed.
- Identify impacts associated with each alternative.
- Evaluate the comparative merits of the alternatives in terms of the areas of concern identified in the scope of work for the proposed project.
- Identify the environmentally superior alternative.
- Discuss reasons behind selection of the environmentally superior alternative.

State of California - The Resources Agency
PETE WILSON, *Governor*
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

November 17, 1998

RECEIVED
NOV 1 7 1998
Gilroy Planning Div.

Mr. Bryan Stice
City of Gilroy
7351 Rosanna Street
Gilroy, California 95020

Dear Mr. Stice:

Gilroy Sports Park
Notice of Preparation (NOP) of a
Draft Environmental Impact Report (EIR)
SCH Number 98102079, Santa Clara County

Department of Fish and Game personnel have reviewed the NOP of a Draft EIR for the Gilroy Sports Park project. The project would allow development of a sports complex on 133.2 acres adjacent to the Uvas Creek in Gilroy. Plans include 12 baseball and softball diamonds, six soccer fields; and volley ball, bocce ball, picnic, commercial recreation, concession, and associated facilities. We believe the following issues need to be addressed in the Draft EIR.

Plant and wildlife species that are present or dependant upon potentially impacted habitats should be identified in the Draft EIR. Particular attention needs to be paid to State- and Federally-listed and candidate species, and unlisted species whose status is of regional concern. The California Natural Diversity Data Base and the California Native Plant Society should be consulted to identify sensitive species that have been documented in the area. Consultation with the data base should not preclude or substitute for qualitative and/or quantitative field surveys.

Sensitive species that are likely to occur in this vicinity include the western pond turtle (*Clemmys marmorata*), California tiger salamander (*Ambystoma californiense*), western spadefoot (*Scaphiopus hammondii*), California red-legged frog (*Rana aurora draytonii*), foothill yellow-legged frog (*Rana boylii*), San Joaquin whipsnake (*Masticophis flagellum ruddocki*), burrowing owl (*Athene cunicularia*), steelhead (*Oncorhynchus mykiss*), several diurnal raptors, and several sensitive bat species. The presence of these and other rare, threatened, endangered species, or California species of special concern must be addressed and

appropriate surveys conducted by a qualified biologist. Details regarding specific survey protocol can be obtained from this Department. Impacts to these species and their habitats should be avoided. Impacts which are unavoidable must be identified and appropriate mitigation provided.

If the project area contains suitable habitat for burrowing owls, this Department recommends that surveying for the owls be conducted over at least four consecutive evenings during the height of the nesting season, between April 15 and July 15, and over four evenings between December 1 and January 31 for winter residents. If burrowing owls are found during nesting season surveys, further survey work may be unnecessary. Details regarding recommended survey protocol may be obtained from this Department. If burrowing owls are observed during surveys, the extent of burrowing owl habitat on the site should be delineated by a qualified ornithologist. A 1:1 acreage replacement ratio will be required to offset permanent impacts to burrowing owl habitat. Land identified to off-set impacts to burrowing owls must be protected in perpetuity either by a conservation easement or fee title acquisition. Burrowing owl mitigation lands should be identified within the Gilroy area.

If it is determined that burrowing owls occur on the project site, a burrowing owl habitat mitigation plan must be prepared and shall be subject to the review and approval of the Department. A Mitigation Agreement (MA) that will legally bind the applicant to the conditions of the plan shall be executed between the Department and the applicant. The Department will not issue a permit to allow any owl relocation activities until the mitigation plan has been finalized and the MA has been executed. The plan should identify the mitigation site and any activities necessary to enhance the site, including the construction of artificial burrows. The plan should also include a description of monitoring and management methods proposed at the mitigation site. Monitoring and management of any lands identified for mitigation purposes shall be the responsibility of the applicant for at least five years. An annual report should be prepared for submittal to the Department by December 31 of each year. Contingency measures for any anticipated problems should be identified in the plan.

Mitigation for "take" of individual burrowing owls and their nest sites is fulfilled by conducting a pre-construction survey for the species no more than thirty days prior to construction. Pre-construction surveys must be conducted according to the guidelines referenced above. Pre-construction survey results must be submitted to the Department for review and approval.

It is unlawful to take, possess, or destroy burrowing owls, their nests, or their eggs, pursuant to Section 3503.5 of the Fish and Game Code and the Federal Migratory Bird Treaty Act. For this reason, any impacts to the species during the breeding season (February 1 to August 31) must be avoided. If there are construction activities proposed during the owl breeding season, and if burrowing owls are observed on, or within, 250 feet of a project site during pre-construction surveys, a 250-foot protective buffer must be established with the placement of a barrier fence which shall remain in place for the duration of the breeding season. If pre-construction surveys are conducted during the non-breeding season and burrowing owls are observed on the site, the Department will authorize owl eviction only after the habitat mitigation plan and MA have been finalized.

The Draft EIR should contain a complete description and map of the habitats in the project area. The Department recommends mitigation for all habitat types; grasslands and scrub are often developed without mitigation, leading to an unaddressed cumulative loss of wildlife habitat. We recommend project applicants be required to offset development impacts by setting aside or acquiring an equal number of acres for open space. Areas to be retained as open space should not be completely encircled by development as this decreases the value of the area for wildlife. We recommend that open space areas on and off project sites be connected to one another by corridors to permit wildlife passage between the areas.

It is the policy of this Department that a project should cause no net loss of either wetland acreage or wetland habitat value. We recommend impacts to creeks be avoided where possible. Impacts would include, but are not limited to, road crossings, culverts, channelization, and rip rap. If improvements to creeks must be made for reasons of public health and safety, off-drainage retention basins would be preferable to channelization of the entire stream. In areas which must be channelized, we recommend the channel be oversized in order to allow for vegetation along both banks.

For impacts to riparian habitat that cannot be avoided, we recommend a minimum mitigation ratio of 3:1, based on creation of in-kind acreage of equal or better habitat value. Replacement of habitat acreage at a lower ratio may be appropriate if the replacement is completed prior to the destruction of the original habitat. Any revegetation plans should use native species, with seeds or cutting collected on-site.

The Department recommends a minimum 100-foot buffer, measured outward from the top of each creekbank, be established to protect the creek and its vegetation, and to provide a travel corridor for wildlife. No roads, buildings, yards, paved trails, or turf should be permitted within the buffer. Any unpaved pedestrian trails should be placed outside of the riparian corridor. We do not consider the 50-foot buffer mentioned in the NOP to be adequate to protect this riparian corridor.

The Department has direct jurisdiction under Fish and Game Code sections 1601-1603 in regard to any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any stream. We recommend early consultation since modification of the proposed project may be required to avoid impacts to fish and wildlife resources. Formal notification under Fish and Game Code Section 1601 should be made after all other permits and certifications have been obtained. Work cannot be initiated until a streambed alteration agreement is executed.

The U. S. Army Corps of Engineers (Corps) also has jurisdiction over the discharge of fill to streams and wetlands under Section 404 of the Clean Water Act. We recommend that the Corps be contacted to determine if they have jurisdiction and if they require a permit.

Project documents should include a complete description of methods that will be used to control erosion, prevent siltation and prevent fertilizers, herbicides, and other deleterious materials from entering waterways. Potential impacts caused by water quality changes due to grading and increased storm water runoff should be discussed. Oil/grease separators should be required in storm drain systems, as should sweeping programs for parking lots.

Specific measures to adequately mitigate unavoidable impacts, including cumulative ones, need to be incorporated into project design prior to certification of the EIR. A monitoring program, as required by Assembly Bill 3180, must ensure that mitigation measures are effective and must provide for corrective action if they are not effective.

We request that subsequent documents related to this project be submitted to this Department for our review. If you have any questions regarding our comments, please contact Martha Schauss, Wildlife Biologist, at (831) 623-4989; or Carl Wilcox, Environmental Services Supervisor, at (707) 944-5525.

Sincerely,

Brian Hunter
Regional Manager
Central Coast Region

California Regional Water Quality Control Board

Central Coast Region

Peter M. Rooney
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov
81 Higuera Street, Suite 200, San Luis Obispo, California 93401-5427
Phone (805) 549-3147 • FAX (805) 543-0397

Pete Wilson
Governor

November 4, 1998

RECEIVED
1998
Gilroy Planning D.

Bryan Stice, Planning Department
City of Gilroy, Community Development Department
7351 Rosanna Street
Gilroy, CA 95020

Dear Mr. Stice:

GILROY SPORTS COMPLEX – NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT, SANTA CLARA COUNTY

Thank you for the opportunity to review and comment on the Notice of Preparation of a Draft Environmental Impact Report (DEIR) concerning the proposed project. State Water Code, Division 7 establishes Regional Water Quality Control Board (Regional Board or RWQCB) as the principal agency with primary responsibility for the coordination and control of water quality (§13001), including ocean waters, surface waters, ground waters, wetlands and stormwater. The Regional Board is responsible for administering regulations established by the Federal Clean Water Act. Additionally, the California Water Code establishes broad state authority for regulation of water quality. Any person discharging waste, or proposing to discharge waste, that could affect the quality of the waters of the state, other than into an already regulated community sewer system, shall file a report of waste discharge with our office.

The Central Coast Regional Water Quality Control Plan (Basin Plan) explains the Regional Board's strategy for regulating water quality. The Basin Plan also describes the range of responses available to the Regional Board with regards to actions and proposed actions that degrade or potentially degrade the beneficial uses of the Waters of the State of California. The proposed project should conform to our Basin Plan's relevant programs and policies.

We understand that the project involves construction of a multi-use 78.4-acre sports park located on a 133.2-acre site. Preliminary plan components include:

- Recreational play fields (8 softball diamonds and 4 soccer fields)
- Premier play fields (one 90-foot baseball diamond, two little leagues diamonds and one soccer field)
- Competition play fields (one softball/baseball diamond and one soccer field)
- 8.8-acres of park preserve with volleyball, bocce ball courts, concession/restrooms, family picnic and play area.
- Commercial recreation (indoor soccer, roller hockey, community building, and storage)

- 1043 parking spaces
- Night watch park ranger station
- Infrastructure and facilities needed to support the proposed project

Waste discharge could result from many aspects of the project and could take either a "point source" or "non-point source" form.

NPDES Stormwater Program

Water quality degradation is regulated by the Federal National Pollutant Discharge Elimination System (NPDES) Program (established by the Clean Water Act), which controls and reduces pollutants to water bodies from point and nonpoint discharge's. In California the program is administered by the California Regional Water Quality Control Boards. The Regional Board has authority to issue NPDES permits for discharges to water bodies in the Central Coast area.

Storm water is the major source of fresh water to creeks and waterways. The Regional Board regulates projects that may impact stormwater quality through the State NPDES General Permit for Discharges of Storm Water Associated with Construction Activity, and the State NPDES General Permit for Discharges of Storm Water Associated with Industrial Activity.

Storm water quality is affected by a variety of land uses and the pollutants generated by these activities. Development and construction activities cause both site-specific and cumulative water quality impacts. Water quality degradation may occur during construction due to discharges of sediment, chemicals and wastes to nearby storm drains or creeks. Water quality degradation may occur after construction is complete due to discharges of petroleum hydrocarbons, oil, grease and metals from vehicles, pesticides and fertilizers from landscaping, and bacteria from pets and people. Runoff may be concentrated and storm water flow increased by newly developed impervious surfaces, which will mobilize and transport pollutants deposited on these surfaces to storm drains and creeks. Concentrated runoff could also impact the geomorphology of the receiving water, which could affect the receiving water beneficial uses. Cumulatively, these discharges will increase pollutant loads in creeks and wetlands within the local watershed, and the Pacific Ocean.

Storm Water Associated with Construction Activity

Projects disturbing more than five acres of land during construction must be covered under the State NPDES General Permit for Discharges of Storm Water Associated with Construction Activity. This can be accomplished by filing a Notice of Intent. The project sponsor must propose and implement control measures that are consistent with this State Construction Storm Water General Permit and with recommendations and policies of the local agency and the RWQCB. The State Construction Storm Water General Permit requires a SWPPP. Developing and implementing a Storm Water Pollution Prevention Plan (SWPPP) should minimize project impacts. The SWPPP should be consistent with the terms of the State Construction Storm Water General Permit (if the site is greater than five acres), policies and recommendations of the local urban runoff program (city and/or county) and Recommendations of the RWQCB.

Storm Water Associated with Industrial Activity
Projects that include facilities with discharges of Storm Water Associated with Industrial Activity must be covered under the State NPDES General Permit for Discharges of Storm Water Associated with Industrial Activity. This may be accomplished by filing a Notice of Intent. The project sponsor must propose control measures that are consistent with this, and with recommendations and policies of the local agency and the RWQCB. In a few cases, the project sponsor may apply for (or the RWQCB may require) issuance of an individual (industry or facility specific) permit.

Storm Water Associated with Urban Development
Runoff from storm events is part of the natural hydrologic process: rainwater that does not infiltrate into the ground flows by the force of gravity into water bodies such as lakes, streams, rivers, and oceans. As runoff heads for receiving waters, naturally vegetated depressions and fills slow the water and filter it for pollutants and sediments. In urban settings, however, natural vegetation and topography have been altered, graded, or paved and storm water is diverted in storm drain pipes. When the drainage pattern of a watershed is so altered, flows increase in concentration and velocity and pick up sediments and pollutants from land surfaces at an increased rate. Storm water that flows through urbanized areas to receiving waters is called "urban runoff."

Urban runoff is known to carry a wide range of pollutants including nutrients, trash and debris, sediments, heavy metals, pathogens, petroleum hydrocarbons, and synthetic organics such as pesticides. Because urban runoff does not originate from a distinct "point" source (e.g., an industrial discharge pipe), it is also often referred to as nonpoint source pollution. These pollutants in urban runoff could negatively impact the vitality of your municipality on many levels. Urban runoff can alter the physical, chemical, and biological characteristics of water bodies to the detriment of aquatic and terrestrial organisms; can make beaches and rivers unsightly or unsafe for human contact; and can negatively impact beneficial activities and uses including water recreation, commercial fishing, tourism and aquatic habitat. In some cases pollutants of concern may not even be visible to the naked eye.

SWPPPs should also be required for projects that may have impacts but are not required to obtain an NPDES permit. Preparation of an SWPPP should be a condition of development. Implementation of the SWPPP should be enforced during the construction period via appropriate options such as citations, stop work orders or withholding occupancy permits. The SWPPP should implement measures as described in

- *Model Urban Runoff Program;* A *How-To Guide For Developing Urban Runoff Programs For Small Municipalities*; July 1998; prepared by the City of Monterey, the City of Santa Cruz, the California Coastal Commission, the Monterey Bay National Marine Sanctuary, the Association of Monterey Bay Area Governments, Woodward-Clyde, and the Central Coast Regional Water Quality Control Board.
- Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters; January 1993; U.S. Environmental Protection Agency;840-B-92-002

- *Start at the Source; Residential Site Planning & Design Guidance Manual for Stormwater Quality Protection;* January 1997; Bay Area Stormwater Management Agencies Association

Stormwater runoff has the potential to impact the water quality of Uvas Creek. Best management procedures should be implemented during construction to minimize disturbances and impacts. Care should be taken in establishing a vegetated buffer zone to separate the existing riparian habitat from the newly developed area. Fertilizers may be carried by surface runoff or may leach below ground into Uvas Creek. Occurrences such as these may have adverse affects to water quality and should be given consideration.

Wetlands

Wetlands enhance water quality through such natural functions as flood and erosion control, stream bank stabilization, and filtration and purification of contaminants. Wetlands also provide critical habitats for hundreds of species of fish, birds, and other wildlife, offer open space, and provide many recreational opportunities. The Regional Board must certify that any permit issued by the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act (covering dredging or filling of wetlands) complies with state water quality standards, or waive such certification. Section 401 Water Quality Certification is necessary for all 404 Nationwide permits, reporting, and non-reporting, as well as individual permits. All projects must be evaluated for the presence of jurisdictional wetlands.

Water quality impacts occur in wetlands from construction of structures in waterways, dredging, filling, and altering drainage to wetlands. Destruction or impact to wetlands should be avoided. 401 Certification may be denied based on significant adverse impacts to "Waters of the State"

The goals of the California Wetlands Conservation Policy include ensuring "no overall net loss and achieving a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values". In the event wetland loss is not avoidable, mitigation will be preferably in-kind and on-site with no net destruction of habitat value. Mitigation will preferably be completed prior to, or at least simultaneous to, the filling or other loss of existing wetlands. Successful mitigation projects are complex tasks and difficult to achieve. This issue will be strongly considered during agency review of any proposed wetland fill. Wetland features or ponds created as mitigation for the loss of existing "jurisdictional wetlands" or "waters of the United States" cannot be used as storm water treatment controls.

Attached to this document are a list of control actions to avoid and/or minimize impacts to stormwater quality and wetlands.

Wastewater Discharge

The Gilroy Sports Park will produce wastewater, and as such will require connection existing wastewater treatment facilities or development of an on-site disposal system such as sewer or septic tanks. Consideration must be given to ensure adequate capacity exists for wastewater disposal.

Our Basin Plan includes the following Regional Water Quality Control Board Management Principle:

> *The number of waste sources and independent treatment facilities shall be minimized and the consolidated systems shall maximize their capacities for wastewater reclamation, assure efficient management of, and meet potential demand for reclaimed water.*

This principle conforms with our Basin Plan goals:

1. to manage municipal and industrial wastewater disposal as part of an integrated system of fresh water supplies to achieve maximum benefit of fresh water resources for present and future beneficial uses and to achieve harmony with the natural environment, and

2. to continually improve waste treatment systems and processes to assure consistent high quality effluent based on best economically achievable technology.

To meet these goals, our Board encourages comprehensive surface and ground water management plans prepared by local and regional water management agencies. It seems prudent to consolidate wastewater treatment and disposal in order to effectively implement wastewater reclamation. The proposed project should attempt to conform to our above-stated Basin Plan's Management Principle or goals. Specific Plans should develop wastewater infrastructure according to a comprehensive countywide plan.

If you have any questions, please call **Tom Kukol at (805)549-3689 or tkukol@swrcb.ca.gov .**

Sincerely,

for Roger W. Briggs
Executive Officer

TJK\H:\CEQA\S-BENITO\EIR\Paicines Ranch Resort.doc
Task: 121-01
File: Agency: San Benito County

SANTA CLARA
Valley Transportation Authority

November 20, 1998

City of Gilroy
Department of Community Development
7351 Rosanna Street
Gilroy, CA 95020-6141

Attention: Bryan Stice

Subject: Gilroy Sports Park Notice of Preparation of a Draft EIR

Dear Mr. Stice:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the project referenced above for the development of the Gilroy Sports Park at the southwest corner of Thomas Road and Highway 101. VTA comments follow, and are separated into *Transit Service* and *Congestion Management Program* issues to reflect our dual role in reviewing the project.

Transit Service

VTA currently maintains a bus stop within walking distance of the proposed project on Thomas Road, to the south and west of Princevalle Road. The stop is served by *Line 68* which travels between San Jose Diridon Station and Gavilan College.

To allow patrons of the project to safely and conveniently access existing and future transit services in the area, VTA staff recommend that the City consider including the following features in the project:

- A sidewalk along Thomas Road.
- Direct pedestrian pathways that link the various activity centers with the sidewalk on Thomas Road.

VTA staff are also considering the possibility of bringing bus service to the sports park. Please continue to forward information about this project to VTA for review and comment. VTA staff will work with City and project staffs on this possibility.

Congestion Management Program

The Congestion Management Program (CMP) requires a *Transportation Impact Analysis (TIA)* for any project that is expected to generate 100 or more new peak hour trips. Based on the information provided on the size of the project, a *TIA* may be required.

The CMP's *Transportation Impact Analysis Guidelines* should be used when preparing the *TIA*. These guidelines include the analysis of bikeways, parking, site circulation and pedestrian access, as well as roadways. If there are any questions regarding the guidelines, please call the CMP at (408) 321-5725.

We appreciate the opportunity to review this project. If you have any questions, please call Lauren Bobadilla of my staff at (408) 321-5776.

Sincerely,

Thomas Rountree
Environmental Program Manager

TDR:LGB:kh

INTEROFFICE MEMORANDUM
COMMUNITY DEVELOPMENT DEPARTMENT
BLES DIVISION

TO: Bryan Stice, Planner I
FROM: Rafael Adame, BLES Manager/Building Official
DATE: November 3, 1998
RE: EIR for Gilroy Sports Park

The proposed sports facility must comply with the most current State and Federal Building Code requirements. The following a list of potential Building Code issues for this project based on the conceptual design information submitted for review and is not intended to be all inclusive:

1. All structures located within a flood zone will be required to meet FEMA requirements for finish floor elevations and protection of building systems (Electrical, mechanical etc.).

2. Disabled access for all activity areas (seating, fields, walk ways, pedestrian trails, concessions, bathrooms, etc.) must be provided.

3. Bathroom facilities must meet the number of fixtures required by State and Federal regulations. Assembly facilities and buildings are required to provide higher number of fixtures in women's bathrooms.

4. All proposed building and structure locations will require a soils investigation to address seismic motion, ground shaking or liquefaction of the soil.

5. If night lighting is planned for these fields, the impact on surrounding areas will need to be considered.

If you have any questions or concerns on these comments contact me at XT 0431.

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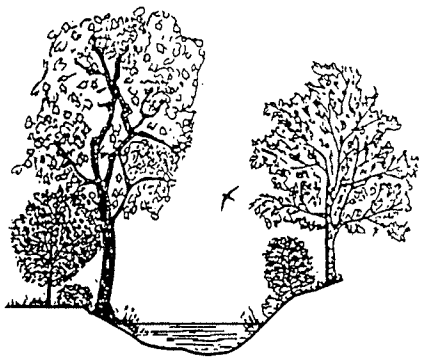
Gilroy Planning

SANTA CLARA COUNTY
STREAMS FOR TOMORROW
Post Office Box 1409
San Martin, California 95046



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Gilroy Planning

November 12, 1998

Mr. Bryan Stice
Planning Division
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

Dear Mr. Stice:

Notice of Preparation of a Draft Environmental
Impact Report for Gilroy Sports Park and
Urban Service Area Amendment Request;
Santa Clara County

We have the following comments and recommendations regarding the scope and content of your environmental assessment for subject project.

Uvas Creek and its riparian vegetation corridor support fish and wildlife populations of local and regional importance. The proposed project has potential to adversely impact these resources and their habitats.

In addition to evaluating potential impacts to special-status animals and plants, the Draft EIR also must address potential impacts to the seasonal patterns of fish and wildlife use of the Creek's aquatic and riparian habitats. Although the majority of fish and wildlife species potentially impacted may be relatively common species, their local abundance, diversity, and population vitality may be reduced and thus adversely effected by construction and use of the proposed Gilroy Sports Park and Trail Extensions. These projects and activities may impact sensitive wildlife habitat - directly or indirectly - forcing displacement and loss of the birds, mammals and other wildlife that use this unique stream/riparian habitat complex for escape cover, feeding and nesting. These impacts should be evaluated in the Draft EIR as both potential substantial project and cumulative environmental impacts.

The project includes a "50-foot wide wildlife easement "that appears to be measured from top of bank. This easement is insufficient to protect the biological integrity of the existing riparian corridor and its wildlife use. The easement width should be sized to protect the riparian habitat values from direct and indirect human-induced impacts. It should be sufficient to preserve and, where necessary, improve the "ecotone edge effect" attribute of this unique habitat, buffer the impacts of adjacent human activities, and provide secure corridors for wildlife travel and dispersal.

As mitigation for direct, indirect and cumulative impacts to riparian and wildlife resources, the project design should be modified to provide a wildlife easement that is either a minimum of 100-feet wide as measured from top of bank or extends to the outer tree dripline, whichever is greater. In addition, this dedication should include a vegetation planting program (and funding) to (1) widen narrow segments of the tree corridor; (2) infill gaps in the canopy cover; (3) improve corridor edge effect values; and (4) provide buffer and barrier plantings between the tree dripline and outer edge of the easement.

No public access, trails, roadways, structures nor developments should be allowed within this wildlife easement, except for the pedestrian bridge crossing to Gavilan College. Undisturbed shade canopy provided by trees and bushes is one of the most critical elements of riparian habitat quality. No unnecessary infringement should be allowed on this valuable riparian habitat.

Active play and sports areas should be setback a minimum of 100 feet from the outer edge of the wildlife easement. The proposed multi-use trails should be setback at least 10 feet from the easement edge, as should picnic areas, interpretive features, and other passive use areas. If night lighting is proposed for active recreational facilities such as ball play fields, volleyball courts, etc., a setback of at least 200 feet from easement edge is preferred. However, we recognize that the exact distance should be determined by a site-specific analysis in consultation with a qualified biologist.

The Draft EIR must identify the agency responsible for the wildlife easement and include a commitment to prepare, fund and implement a comprehensive Wildlife Easement Corridor Habitat Preservation and Enhancement Plan.

The Draft EIR must provide a complete description of the Best Management Practices and project-specific features and measures that will be used during both project construction and operation to control erosion and prevent silt and other deleterious materials from entering Uvas Creek. All potential impacts to Uvas Creek water quality must be evaluated and fully mitigated.

Potential Uvas Creek water quality degradation due to grading activities; increased storm water runoff; hydrocarbons and sediments from roadways and parking lots; and fertilizer, herbicide and pesticide applications must be discussed. Impacts to Uvas Creek surface water quality must be thoroughly evaluated. Mitigation measures to prevent contaminated runoff from entering the Creek must be identified.

In accordance with CEQA Guidelines Section 15126 (d), the Draft EIR should describe alternative project locations that would site the Sports Park away from stream channels, thus avoiding the environmental concerns, impacts and mitigations necessary for a project located adjacent to a major stream and riparian corridor such as Uvas Creek. Such an alternative may prove to be the CEQA environmentally superior alternative.

Please notify us in advance of any public scoping meetings, workshops, discussions or hearings on subject project and CEQA process. Also, please send us a copy of your Public Notice regarding eventual availability of the Draft EIR for public comment.

Thank you for the opportunity to provide comments and recommendations in response to your Notice of Preparation. If you have any questions about our response, please contact me at the letterhead address or telephone me at (408) 683-4330 (voice and fax).

Sincerely,

Keith R. Anderson

Keith R. Anderson
Environmental Advocate

cc: The Honorable Don Gage
Supervisor, District 1
Board of Supervisors

Ms. Rosemary Kamei
Director, District 1
Santa Clara Valley Water District

Mr. Brian Hunter
Regional Manager
Department of Fish and Game

Mr. Craig Breon
Environmental Advocate
Santa Clara Valley Audubon Society

Ms. Debbie Ruddock
Chapter Director
Sierra Club, Loma Prieta Chapter

SENT NOTICE OF COMMUNITY SCOPING MEETING NOV. 13, 1998. BS

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1998
Gilroy Planning Dept.

Santa Clara Valley Water District

5750 ALMADEN EXPRESSWAY
SAN JOSE, CA 95118-3686
TELEPHONE (408) 265-2600
FACSIMILE (408) 266-0271
www.scvwd.dst.ca.us

AN EQUAL OPPORTUNITY EMPLOYER

November 2, 1998

Mr. Bryan Stice
Community Development Department
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

Dear Mr. Stice:

Subject: Notice of Preparation of a Draft Environmental Impact Report for Gilroy Sports Park

The Santa Clara Valley Water District (District) has reviewed the subject document received on October 22, 1998. The proposed scope of work identified in the Notice of Preparation indicates that issues related to flooding of the site will be addressed in the Draft Environmental Impact Report (DEIR). The City of Gilroy (City) or the hydrological engineering firm hired by the City to address this issue may contact me at (408) 265-2607, extension 2253, to discuss District concerns.

We look forward to review of the DEIR and share the City's excitement for this proposed sports park, as it is an excellent use of this land considering the constraints of the flooding easement.

Sincerely,

Sue Tippets

Sue A. Tippets, P.E.
Supervising Engineer
Community Projects Review Unit

recycled paper

County of Santa Clara

Roads and Airports Department
Land Development Services

101 Skyport Drive
San Jose, California 95110

RECEIVED
NOV 3 0 1998
Gilroy Planning Div.

November 23, 1998

✓ Mr. Bryan Stice
Community Development Department
City of Gilroy
7351 Rosanna Street
Gilroy, California 95020

Subject: Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR)

Gilroy Sports Park

Dear Mr. Stice:

Your October 20, 1998 NOP concerning the proposed project has been reviewed. Our comments are as follows:

(1) In addition to the intersections listed on Page 21, the traffic report should analyze Thomas Road/Church Street and Thomas Road/Santa Teresa Blvd. intersections also. The methodology should be acceptable to Santa Clara County Roads and Airports Department also.

(2) The Draft EIR should include a traffic analysis demonstrating the traffic impacts of the potential traffic generated by the proposed development on the County's facilities, i.e., Santa Teresa Blvd., Thomas Road, Mesa Road, etc. The traffic report should list the proposed mitigation measures and also include a funding source of the proposed mitigations.

(3) A copy of the Draft EIR should be furnished for our review and comments.

Board of Supervisors: Donald F. Gage, Blanca Alvarado, Pete McHugh, James T. Beall, Jr., S. Joseph Simitian
County Executive: Richard Wittenberg

We thank you for the opportunity to review this matter. Please call me at 573-2462 if you have any questions.

Sincerely,

Ashok Vyas
Project Engineer

AAV:rtj
cc: DEC
MA
JME
File

Gilroy Sports Park and Urban Services Area Amendment

Environmental Impact Report Technical Composite

Prepared for:

City of Gilroy
7351 Rosanna Street
Gilroy, California 95020
(408) 848-0440
Mr. William A. Headley, Jr.
Facilities and Parks Development Manager

January 1999

Prepared by:

EMC Planning Group Inc.

99 Pacific Street, Suite 155F
Monterey, California 93940
Phone: (831) 649-1799
Fax: (831) 649-8399
E-Mail: emcgroup@emcplanning.com

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Transportation Impact Analysis, Gilroy Sports Park

EDWARD L. PACK ASSOCIATES, INC.

13980 BLOSSOM HILL ROAD, SUITE 100
LOS GATOS, CA 95032

Acoustical Consultants

TEL: 408-723-8900
FAX: 408-723-8099

NOISE ASSESSMENT STUDY
FOR THE
ENVIRONMENTAL IMPACT REPORT,
GILROY SPORTS PARK
MONTEREY FRONTAGE ROAD, GILROY

Prepared for
EMC Planning Group, Inc.
Monterey, CA

Prepared by
Jeffrey K. Pack

November 18, 1998
Project No. 30-081

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I. Background Information on Acoustics

Noise is defined as unwanted sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing.

Most of the sounds which we hear in our normal environment do not consist of a single frequency, but rather a broad range of frequencies. As humans do not have perfect hearing, environmental sound measuring instruments have an electrical filter built in so that the instrument's detector replicates human hearing. This filter is called the "A-weighting" network and filters out low and very high frequencies. All environmental noise is reported in terms of A-weighted decibels, notated as "dBA". All sound levels used in this report are A-weighted unless otherwise noted. Table I, below, shows the typical human response and noise sources for A-weighted noise levels.

TABLE I

The A-Weighted Decibel Scale, Human Response, and Common Noise Sources

Noise Level, dBA	Human Response	Noise Source
120-150+	Painfully Loud	Sonic Boom (140 dBA)
100-120	Physical Discomfort	Discotheque (115 dBA) Motorcycle at 20 ft. (110 dBA) Power Mower (100 dBA)
70-100	Annoying	Diesel Pump at 100 ft. (95 dBA) Freight Train at 50 ft. (90 dBA) Food Blender (90 dBA) Jet Plane at 1000 ft. (85 dBA) Freeway at 50 ft. (80 dBA) Alarm Clock (80 dBA)
50-70	Intrusive	Average Traffic at 100 ft. (70 dBA) Vacuum Cleaner (70 dBA) Typewriter (65 dBA)
0-50	Quiet	Normal Conversation (50 dBA) Light Traffic at 100 ft. (45 dBA) Refrigerator (45 dBA) Whispering (35 dBA) Leaves Rustling (10 dBA) Threshold of Hearing (0 dBA)

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a mixture of noise from distant sources that create a relatively steady background noise from which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors, L_1, L_{10}, L_{50} and L_{90} are commonly used. They are the A-weighted noise levels exceeded during 1%, 10%, 50% and 90% of a stated time period. The continuous equivalent-energy level (L_{eq}) is that level of a steady state noise which has the same sound energy as a time varying noise. It is often considered the average noise level and is used to calculate the DNL and CNEL described below.

In determining the daily level of environmental noise, it is important to account for the difference in response of people to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. However, most household noise also decreases at night and exterior noise becomes very noticeable. Further, most people sleep at night and are very sensitive to noise intrusion. To account for human sensitivity to nighttime noise levels, the Day-Night Level (DNL) noise descriptor was developed. The DNL is also called the L_{dn}. Either is acceptable, however, DNL is more popular worldwide. DNL divides the 24-hour day into the daytime period of 7:00 a.m. to 10:00 p.m. and the nighttime period of 10:00 p.m. to 7:00 a.m. The nighttime noise levels are penalized by 10 dB to account for the greater sensitivity to noise at night. The Community Noise Equivalent Level (CNEL) is another 24-hour average which includes both an evening (7:00 p.m. - 10:00 p.m.) and a nighttime penalty. The proper notations for the Day-Night Level and the Community Noise Equivalent Level are dB DNL and dB CNEL, respectively, as they can only be calculated using A-weighted decibels. It is, therefore, considered redundant to notate dBA DNL or dBA CNEL.

The effects of noise on people can be listed in three general categories:

- subjective effects of annoyance, nuisance, dissatisfaction;
- interference with activities such as speech, sleep, learning, relaxing;
- physiological effects such as startling, hearing loss.

The levels associated with environmental noise, in almost every case, produce effects only in the first two categories. Workers in industrial plants, airports, etc., can experience noise in the last category. Unfortunately, there is, as yet, no completely satisfactory way to measure the subjective effects of noise, or of the corresponding reactions of annoyance and dissatisfaction. This is primarily due to the wide variation in individual thresholds of annoyance and differing individual past experiences with noise.

Thus, an important way to determine a person's subjective reaction to a new noise is to compare it to the existing environment to which one has adapted, i.e., the "ambient". In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by the hearers.

With regard to increases in A-weighted noise level, knowledge of the following relationships will be helpful in understanding this report.

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived.
- Outside of the laboratory, a 3 dB change is considered a just-perceptible difference.
- A change in level of at least 5 dB is required before any noticeable change in community response would be expected.
- A 10 dB change is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse change in community response.

The adding or subtracting of sound levels is not simply arithmetic. The sound levels, in decibels, must be converted to bels, the anti-log's of which ar then calculated. The manipulation is then performed (arithmetic addition or subtraction), the logarithm of the sum or difference is calculated, the final number is then multiplied by 10 to convert bels to decibels. The formula for adding decibels is as follows:

$$\text{Sum} = 10\log(10^{SL/10} + 10^{SL/10}) \qquad \text{where, SL is the Sound Level in decibels.}$$

For example, 60 dB + 60 dB = 63 dB, and 60 dB + 50 dB = 60 dB. Two sound sources of the same level are barely noisier than just one of the sources by itself. When one source is 10 dB higher than the other, the less noisy source does not add to the noisier source.

II. Acoustical Setting

A. Description of the Study Area

The proposed development site is located west of Monterey Frontage Road and U.S. Highway 101, between Thomas Road and Monterey Street in Gilroy, as shown on the Site Plan, Ref. (a). The site is on approximately 80 acres of Uvas Creek Park Preserve land bordered by residences to the north and east, and Uvas Creek to the south and west. The site is relatively flat and at-grade with Monterey Frontage Road. Current surrounding land-uses include light agriculture operations north of Farman Lane and residential land-use along Farman Lane and along Monterey Frontage Road to the east. Vacant land extends west to Uvas Creek. Additional residences are located approximately 1,000 ft. to the north along Thomas Road. The nearst residences are located on Farman Lane and Monterey Frontage Road.

The existing, primary sources of noise at the site are Monterey Street, U.S. Highway 101, and Monterey Frontage Road traffic, which carry Average Daily Traffic (ADT) volumes of 7,750 vehicles, 46,000 vehicles, and 560 vehicles, respectively, as reported by the project traffic consultant, Ref. (b), and CalTrans, Ref. (c). Future traffic volumes are predicted to increase to 8,340 ADT on Monterey Street and 590 ADT on Monterey Frontage Road by year 2020, as reported by the project traffic consultant, Ref. (b). Future traffic volume data for Highway 101 is unavailable.

Sources of noise associated with residences along Farman Lane and Monterey Frontage Road are also noticeable at the project site. The primary noise sources in this area are a dog kennel inhabited by several dogs, a semi-truck parking periodically, and general activities of the residents (use of tools, music, children playing, etc.).

Ingress and egress to the development will be by way of an access driveway off of Monterey Frontage Road, 800 ft. north of Farman Lane. The proposed access driveway will carry a projected 5,700 vehicles ADT for future year 2020, as reported by the project traffic consultant, Ref. (b).

B. Noise Standards

The noise standards applicable to the project are presented in the City of Gilroy General Plan Noise Element, Ref. (d). The standards specify that exterior noise exposures of up to 60 dB DNL are considered satisfactory for residential land uses. The Noise Element does not contain separate standards for park uses, therefore, the residential standard is used herein for evaluation purposes. In Table 1 of the General Plan Noise Element, it states that evaluation of the 60 dB DNL limit is to be conducted at no less than 15 feet from rear household walls, 20 feet from front household walls, 6 feet from side walls, and 10 feet from walls adjacent to streets. Residential interior noise exposures are limited to 45 dB DNL.

The noise levels shown below are without the application of mitigation measures and represent the noise environment for the undeveloped site.

C. Existing Noise Levels

To determine the existing noise environment at the site, continuous recordings of the sound levels were made at two locations. Location 1 was at a distance of 55 ft. west of the Monterey Frontage Road centerline and 10 ft. north of the Farman Lane centerline. Location 2 was at a distance of 27 ft. east of the Monterey Frontage Road centerline and 210 ft. from the nearest wall of the first residence along Monterey Frontage Road. These locations were chosen for the security of the sound measuring equipment. The measurements were made on October 29-31, 1998 for two separate, continuous 24-hour periods using two Larson-Davis Model 812 Precision Integrating Sound Level Meters. The meters yield, by direct readout, a series of descriptors of the sound levels versus time, which are commonly used to describe community noise, as described in Appendix B. The results of the measurements are shown in the data table in Appendix C. The descriptors shown in the appendix include the L_1, L_{10}, L_{50}, and L_{90}, i.e., those levels exceeded 1%, 10%, 50% and 90% of the time. Also shown are the maximum and minimum levels and the equivalent-energy levels (L_{eq}), which are used to calculate the DNL.

The results of the field survey reveal that the primary source of noise at the site is traffic on Monterey Street, U.S. Highway 101, and Monterey Frontage Road. As shown by the measurement data, the L_{eq}'s at a distance of 27 ft. from the centerline of Monterey Frontage Road ranged from 63.3 to 67.0 dBA during the daytime and from 57.7 to 63.6 dBA at night. The L_{eq}'s generally reflect the existing vehicle patterns adjacent to the site, with the highest noise levels occurring during the morning and afternoon peak traffic periods, and the lowest noise levels occurring during the late night and early morning hours.

Noise from Farman Lane is limited primarily to residential noise (use of power tools, playing music, children playing, etc.). Dogs barking is also a regular source of noise in the area due to the kennel along Farman Lane which houses several dogs. Trucking operations occurred during the site study and it was observed that trucking operational noise may periodically generate an average noise level of up to 73 dBA L_{eq} at the nearest property line for brief periods. As shown by the measurement data, the L_{eq}'s at a distance of 55 ft. from the centerline of Monterey Frontage Road and 10 ft. from the centerline of Farman Lane ranged from 55.1 to 72.9 dBA during the daytime and from 52.3 to 58.5 dBA at night. The peak value of 72.9 dBA at this location is most likely attributed to the arrival and parking of a semi-truck on Farman Lane.

Traffic noise dissipates at the rate of 3 to 6 dB for each doubling of the distance from the centerline of the roadway. Single or stationary source noise diminishes at a rate of 6 dB per doubling of the distance from the source to the receiver. Thus, locations on the site at greater distances from Monterey Street, U.S. Highway 101, Monterey Frontage Road, or Farman Lane will experience lower noise levels.

III. Impacts

A. Impacts to the Project

1. Existing and Future Noise Exposures

To determine the noise impacts to the planned project, the existing noise exposures were evaluated against the standards of the City of Gilroy Noise Element. The DNL's were calculated by decibel averaging of the L_{eq}'s as they apply to the daily time periods of the DNL index. The average L_{eq} values were applied to the standard formula for calculating the DNL, which includes a 10 dB weighting factor during the nighttime

hours to account for the increased human sensitivity to noise at night. The mathematical formula used to calculate the DNL is shown in Appendix B.

The results of the calculations indicate that the existing noise exposure is 52 dB DNL at the closest site boundary to Monterey Frontage Road (420 ft. east of the centerline). At the entrance to the planned access driveway to the sports park, the existing noise exposure is 63 dB DNL. The calculated noise exposure of 52 dB DNL at the closest site boundary is an insignificant impact to the project.

To determine the noise environment under future traffic conditions, future traffic volumes were discussed with the project traffic engineer. Traffic volumes are predicted to increase to 8,340 ADT on Monterey Street by year 2020. This increase corresponds to 0.4 dB increase. Exact predicted traffic volumes were not available for U.S. Highway 101; however, based on a recent acoustical analysis updating the Santa Clara County Noise Element conducted for P.A.D. in 1994 by Edward L. Pack Associates, Inc. it is anticipated that U.S. Highway 101 will experience 3 dB increase in traffic noise by year 2020, Ref. (e). Traffic volumes are predicted to increase to 590 ADT on Monterey Frontage Road by year 2020. This increase corresponds to 0.2 dB increase. As Farman Lane serves predominantly as a driveway (it is a dead-end, dirt road) for the residents along this area of Monterey Frontage Road, there will not be a significant increase in traffic levels. In the future, the surrounding noise environment will be up to 56 dB DNL at the closest site boundary to Monterey Frontage Road (420 ft. east of the centerline), and will be an insignificant impact to the project.

B. Project-Generated Noise Impacts

1. Project Access Driveway

The planned access driveway for the Gilroy Sports Park has a projected ADT of 5,700 vehicles, as reported by the project traffic consultant, Ref. (b). For vehicles traveling at an average speed of 25 miles per hour (the assumed travel speed on the access driveway), the maximum estimated noise exposure at the most impacted residence (50 ft. south of the centerline of the access driveway) on Monterey Frontage Road is 58 dB DNL. The corresponding 60 dB DNL contour is located at 39 ft. from the centerline of the access driveway. Thus, project-generated noise exposure from the proposed access driveway to the Gilroy Sports Park will be an insignificant impact to the surrounding residences.

2. Athletic Events

Athletic event noise cannot be determined precisely without detailed knowledge of each athletic event and exact competition schedules. As this information is not available at this time, predictions of the noise levels associated with sporting events at the planned Gilroy Sports Park have been made based on previous acoustical studies of athletic event sound levels, Refs.(f, g, h). The following table lists the noise levels for various activities at fixed distances. The noise exposures listed reflect noise from competition, crowd cheering, referee whistles, and public address systems. The figures for soccer games and baseball games incorporate an average attendance of 2.2 spectators per participant in the game. The figure for softball games is lower because there are generally fewer spectators attending adult softball games than youth baseball games; an average of 1.7 spectators per participant in the game was incorporated in the noise exposure. This resulted in 75, 70, and 53 spectators for each soccer game, baseball game and softball game, respectively. The figure for roller hockey is based only on noise created by the participants as data for roller hockey spectators are available.

Athletic Event Noise Exposure Table

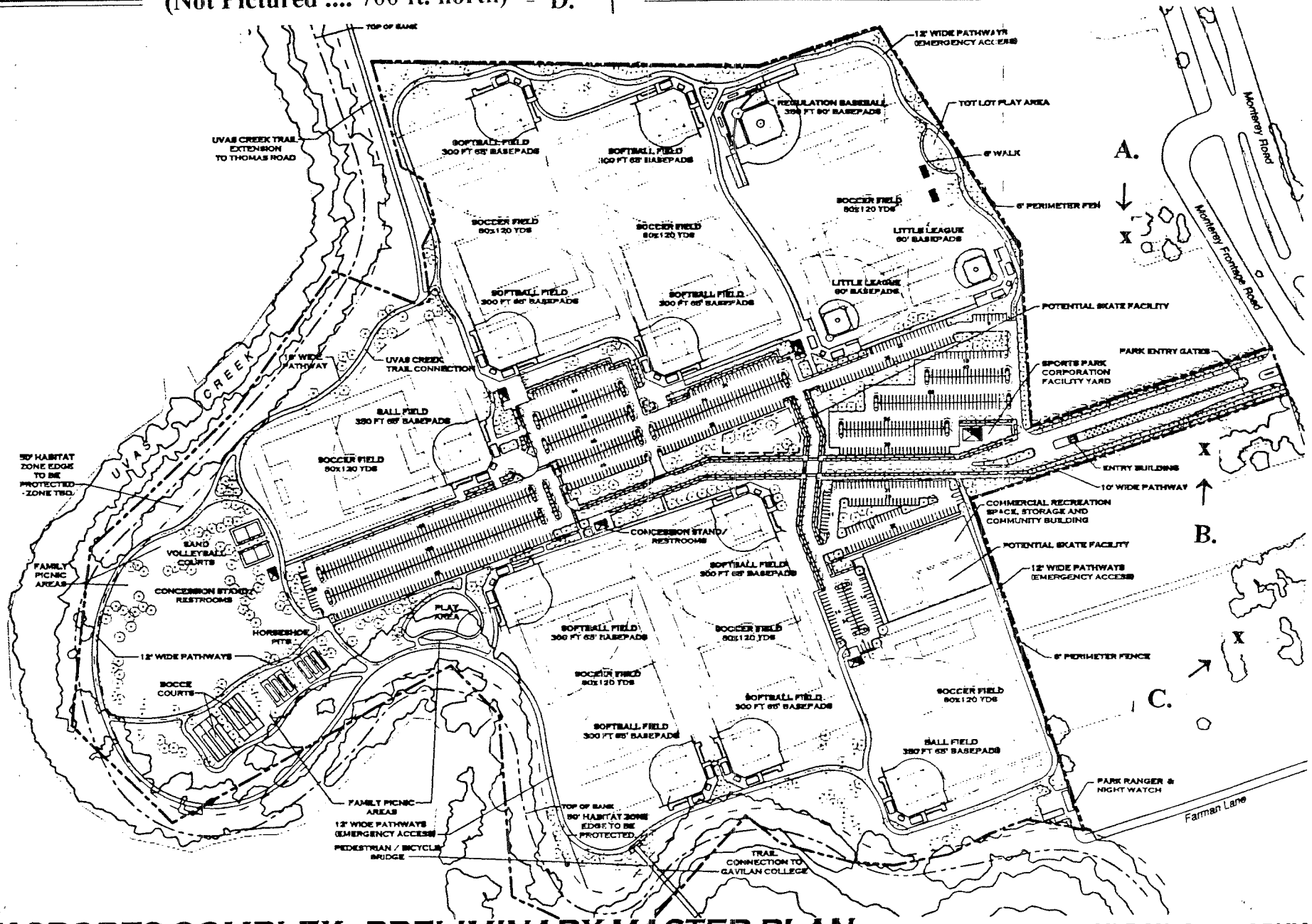
Event Type	dB DNL	distance from source
Youth Soccer	51 dB	260 ft.
Youth Baseball	51 dB	260 ft.
Adult Softball	50 dB	260 ft.
Roller Hockey	55 dB	60 ft.

[note: the source locations were taken to be the center of the soccer field, home plate on the baseball and softball fields, and the center of the roller hockey rink]

The total noise exposure at the surrounding residential property lines from athletic events at the park will depend upon distances from the noise sources to the property lines, duration of events, and noise levels of individual sources. Sound attenuation due to vegetation is insignificant. This study analyzes four residential locations surrounding the site for which projected noise exposure calculations have been executed. Please see Figure 1 for the placement of the noise exposure calculation locations. Locations A, B, and C are the residences to the east of the planned sports park. Note that location D does not appear on Figure 1, however, it represents the most noise impacted home on Thomas Road located 700 ft. north of the northern boundary of the planned sports park.

Four activity scenarios of possible noise exposures during uses of the Gilroy Sports Park have been developed. Each model addresses a worst case scenario. Thus, noise assessment projections offered herein attempt to accommodate anticipated maximum noise exposures in the future. The following table outlines details of each model:

(Not Pictured .... 700 ft. north) = D. ↑



ILROY SPORTS COMPLEX - PRELIMINARY MASTER PLAN *GILROY, CALIFORNIA*

s Landscape Architecture, Inc. *June 1998*

Figure 1

Noise Exposure Models for 4 Configurations of Park Uses

1. All seven soccer fields will run competitions simultaneously from 9:00 AM until 10:00 PM. Games are assumed to run 40 minutes and there are 20 minute breaks between games. This represents the peak soccer season use.

2. All seven soccer fields will run competitions simultaneously from 9:00 AM until 10:00 PM. Games are assumed to run 40 minutes and there are 20 minute breaks between games. Also, both skating areas will be occupied from 10:00 AM until 6:00 PM continuously. This represents peak soccer season use combined with skating area activity.

3. All thirteen baseball fields will run competitions simultaneously from 9:00 AM until 10:00 PM. Games are assumed to run 1hour and there are 15 minute breaks between games. This represents the peak baseball season use.

4. All thirteen baseball fields will run competitions simultaneously from 9:00 AM until 10:00 PM. Games are assumed to run 1hour and there are 15 minute breaks between games. Also, both skating areas will be occupied from 10:00 AM until 6:00 PM continuously. This represents peak baseball season use combined with skating area activity.

There are additional athletic/recreational activity areas planned for the Gilroy Sports Park which include bocci, volleyball, horseshoes, walking trails, and a children's play area. These areas will not contribute significant noise to the overall levels of the park as they are of low intensity use and will be located at great distances to noise sensitive areas. Thus, these activities have been omitted from the noise exposure models mentioned above.

The following is a table representing the calculated noise exposures at the selected four surrounding residential locations for the four noise exposure models described above.

Calculated Noise Exposures at Locations A through D

	Noise Exposures at each residential location in dB DNL			
Model # and Type	**A**	**B**	**C**	**D**
1. Soccer	**53**	**53**	**52**	**52**
2. Soccer & Skating	**54**	**54**	**53**	**52**
3. Baseball	**56**	**56**	**55**	**55**
4. Baseball & Skating	**57**	**56**	**55**	**55**

[*The values were calculated without the inclusion of the existing ambient noise levels on the site.*]

The projected maximum noise exposure at the most impacted residential property line (location A) from the above described athletic events at the park operating under a typical worst-case scenario may be up to 57 dB DNL. When combined with the existing ambient noise exposure at that postion (63 dB DNL) the resulting noise exposure is calculated to be 64 dB DNL. Thus, the activities at the sports park for projected maximum use may increase total noise exposure at the adjacent residence on Monterey Frontage Road by 1 dB. As a 1 dB increase is imperceptible, it is considered a nonsignificant project-generated impact. Project-generated noise will add less than 1 dB to the existing ambient noise environment at the remianing residences on Monterey Frontage Road, Farman Lane, and Thomas Road. Under future traffic conditions, the contribution of noise from the sports park will be less than the existing condition as traffic noise will increase in the future. It should be noted that the noise exposure model

implemented for this analysis proposes a worst case scenario which even under maximum capacity usage is unlikely. The planned project will have no significant impact on existing residences.

C. Construction Phase Impacts

Short-term construction impacts may also be created during construction of the development. Construction equipment generates noise levels in the range of 70 to 90 dBA at a 50 ft. distance from the source and has the potential for disturbing surrounding residential land uses when equipment is operating in their vicinity. The most impacted land uses in the project vicinity would be existing residential uses to the east of the project site.

Since construction is carried out in several reasonably discrete phases, each has its own mix of equipment and consequently, its own noise characteristics. Generally, the site preparation requires the use of heavy equipment such as bulldozers, scrapers, and diesel trucks. The ensuing building construction phases will be quieter and on completion of the project, the area's sound levels will reduce essentially to that of the traffic and residential noise levels.

IV. Mitigation Measures

A. Impacts to the Project

The impacts to the project from the surrounding noise environment are not significant. Noise mitigation measures will not be required.

B. Project-Generated Impacts

As project-generated noise will be an insignificant impact to the residences on Monterey Frontage Road, Farman Lane and Thomas Road, mitigation measures will not be required.

C. Construction Noise Mitigation

- Mitigation of the construction phase noise at the site can be accomplished by using quiet or "new technology" equipment. The greatest potential for noise abatement of current equipment should be the quieting of exhaust noises by use of improved mufflers. It is recommended that all internal combustion engines used at the project site be equipped with a type of muffler recommended by the vehicle manufacturer. In addition, all equipment should be in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train and other components. Construction noise can also be mitigated by the following:

- Scheduling noisy operations for the daytime hours of 7:00 a.m. to 7:00 p.m. to avoid the more sensitive evening and early morning hours.

- Utilizing temporary berms or noise barriers, such as lumber or other material stockpiles.

As noise reduction benefit can also be achieved by appropriate selection of equipment utilized for various operations, subject to equipment availability and cost considerations, the following recommendations for minimizing impacts on the surrounding area are offered:

- Earth Removal: Use scrapers as much as possible for earth removal, rather than the noisier loaders and hauling trucks.
- Backfilling: Use a backhoe for backfilling, as it is less costly and quieter than either dozers or loaders.
- Ground Preparation: Use a motor grader rather than a bulldozer for final grading.
- Building Construction: Power saws should be shielded or enclosed where practical to decrease noise emissions. Nail guns should be used where possible as they are less noisy than manual hammering.

V. Conclusions

In conclusion, traffic noise and surrounding residential noise will not be significant impacts to the project. Project-generated noise levels from the athletic events will be an insignificant impact to the adjacent residences on Monterey Frontage Road, Farman Lane, and Thomas Road and will comply with the limits of the City of Gilroy standards. Construction noise impacts generated by the project may be significant, however, the noise impacts are short-term.

The study findings for existing conditions are based on field measurements and other data and are correct to the best of our knowledge. Future traffic noise projections are based on information provided by the project traffic consultant. Significant deviations in the predicted traffic volumes, uses on adjacent lands, future changes in motor vehicle technology, noise regulations or other future changes beyond our control may produce long-range noise results different from our estimates.

Report Prepared By:

Jeffrey K. Pack
President

APPENDIX A

References

(a) Site Plan, Gilroy Sports Park, Beals Landscape Architecture, Inc., May 1998

(b) Information on Existing and Future Monterey Street and Monterey Frontage Road Traffic Volumes Provided by Sue DeBorde, Fehr & Peers Traffic Engineering, by Transmittal to Edward L. Pack Associates, Inc., November 18, 1998

(c) 1997 Traffic Volumes on California State Highways, State of California Department of Transportation, Division of Traffic Operations, June 1998

(d) Noise Element of the General Plan, City of Gilroy, updated May 20, 1996, as Reported by Ms. Melissa Durkin, by Telecon, to Edward L. Pack Associates, Inc., May 29, 1996

(e) "Environemental Noies Settings Descriptions and Measurement Methodologies, Santa Clara County Noise Element", by Edward L. Pack Associates, Inc., Project No. 26-006, March 8, 1994

(f) "Noise Assessment Study for the Planned St. Francis Youth Center Soccer Fields, College Road, Watsonville", by Edward L. Pack Associates, Inc., Project No. 27-092, November 6, 1995

(g) "Noise Assessment Study for the Planned "Skate and Splash" Roller Hockey Rink, Pearl Avenue, San Jose", by Edward L. Pack Associates, Inc., Project No. 26-089, November 18, 1994

(h) "Acoustical Analysis of the Public Address System, Oak Grove Little League Baseball Field, Calahan Avenue, San Jose", by Edward L. Pack Associates, Inc., Project No. 26-082, October 19,1994

APPENDIX B

Noise Standards, Terminology, Instrumentation,

1. Noise Standards

A. City of Gilroy Noise Element Standards

The City of Gilroy in the noise section of the General Plan specifies the following permissible maximum limits: outdoor noise levels for residential land use is limited to a Day-Night Level (DNL) of 60 dB; commercial land use is limited to a DNL of 65 dB; and industrial land use is limited to a DNL of 76 dB. Indoor noise level limits include a DNL of 45 dB for residential land use, and 61 dBA for commercial land use.

In addition, the City of Gilroy also specifies that the noise standards in Title 24 of the California Code of Regulations be used where applicable.

2. Terminology

A. Statistical Noise Levels

Due to the fluctuating character of urban traffic noise, statistical procedures are needed to provide an adequate description of the environment. A series of statistical descriptors have been developed which represent the noise levels exceeded a given percentage of the time. These descriptors are obtained by direct readout of the Community Noise Analyzer. Some of the statistical levels used to describe community noise are defined as follows:

L_1 - A noise level exceeded for 1% of the time.

L_{10} - A noise level exceeded for 10% of the time, considered to be an "intrusive" level.

L_{50} - The noise level exceeded 50% of the time representing an "average" sound level.

L_{90} - The noise level exceeded 90 % of the time, designated as a "background" noise level.

L_{eq} - The continuous equivalent-energy level is that level of a steady-state noise having the same sound energy as a given time-varying noise. The L_{eq} represents the decibel level of the time-averaged value of sound energy or sound pressure squared and is used to calculate the DNL and CNEL.

B. Day-Night Level (DNL)

Noise levels utilized in the standards are described in terms of the Day-Night Level (DNL). The DNL rating is determined by the cumulative noise exposures occurring over a 24-hour day in terms of A-Weighted sound energy. The 24-hour day is divided into two subperiods for the DNL index, i.e., the daytime period from 7:00 a.m. to 10:00 p.m., and the nighttime period from 10:00 p.m. to 7:00 a.m. A 10 dB weighting factor is applied (added) to the noise levels occurring during the nighttime period to account for the greater sensitivity of people to noise during these hours. The DNL is calculated from the measured L_{eq} in accordance with the following mathematical formula:

$$DNL = [(L_d+10\log_{10}15) \,\&\, (L_n+10+10\log_{10}9)] - 10\log_{10}24$$

Where:

L_d = L_{eq} for the daytime (7:00 a.m. to 10:00 p.m.)
L_n = L_{eq} for the nighttime (10:00 p.m. to 7:00 a.m.)
24 - indicates the 24-hour period
& - denotes decibel addition.

C. A-Weighted Sound Level

The decibel measure of the sound level utilizing the "A" weighted network of a sound level meter is referred to as "dBA". The "A" weighting is the accepted standard weighting system used when noise is measured and recorded for the purpose of determining total noise levels and conducting statistical analyses of the environment so that the output correlates well with the response of the human ear.

3. Instrumentation

The on-site field measurement data were acquired by the use of one or more of the precision acoustical instruments shown below. The acoustical instrumentation provides a direct readout of the L exceedance statistical levels including the equivalent-energy level (L_{eq}). Input to the meters was provided by a microphone extended to a height of 5 ft. above the ground. The meter conforms to ANSI S1.4 for Type 1 instruments. The "A" weighting network and the "Fast" response setting of the meter were used in conformance with the applicable ISO and IEC standards. All instrumentation was acoustically calibrated before and after field tests to assure accuracy.

Bruel & Kjaer 2231 Precision Integrating Sound Level Meter
Larson Davis LDL 812 Precision Integrating Sound Level Meter
Larson Davis LDL 700 Precision Integrating Sound Level Meter
Larson Davis 2900 Real Time Analyzer

APPENDIX C

Noise Measurement Data and Calculation Tables

EMC PLANNING GROUP, INC.
FILE: 30-081 DATE: 10/29-31/981 GILROY SPORTS COMPLEX

LOCATION 1: Residence along Farman Lane

INTV 1 29Oct1998 18:00:00 Duration 1:00.00
Leq 59.6 SEL 88.0 Min 51.0 Max 82.4 Peak 104.0 UWPk 105.2dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 65.6 L10 60.6 L50 57.6 L90 55.2dBA

INTV 2 29Oct1998 19:00:00 Duration 1:00:00
Leq 57.3 SEL 92.9 Min 48.0 Max 68.0 Peak 81.5 UWPk 89.8dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 62.9 L10 59.7 L50 56.5 L90 53.3dBA

INTV 3 29Oct1998 20:00:00 Duration 1:00:00
Leq 56.9 SEL 92.5 Min 44.2 Max 66.1 Peak 82.6 UWPk 88.5dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 62.7 L10 59.8 L50 56.0 L90 51.3dBA

INTV 4 29Oct1998 21:00:00 Duration 1:00:00
Leq 56.5 SEL 92.1 Min 43.6 Max 86.0 Peak 114.4 UWPk 115.2dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 63.6 L10 59.0 L50 55.0 L90 50.1dBA

INTV 5 29Oct1998 22:00:00 Duration 1:00:00
Leq 55.1 SEL 90.7 Min 42.8 Max 73.5 Peak 84.4 UWPk 92.9dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 61.9 L10 57.8 L50 53.8 L90 49.0dBA

INTV 6 30Oct1998 23:00:00 Duration 1:00:00
Leq 55.1 SEL 90.7 Min 39.4 Max 66.4 Peak 80.6 UWPk 112.1dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 62.4 L10 58.3 L50 53.6 L90 49.0dBA

INTV 7 30Oct1998 00:00:00 Duration 1:00:00
Leq 54.0 SEL 89.6 Min 37.7 Max 72.7 Peak 91.6 UWPk 91.0dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 62.5 L10 57.4 L50 51.5 L90 44.9dBA

INTV 8 30Oct1998 01:00:00 Duration 1:00:00
Leq 52.3 SEL 87.9 Min 36.2 Max 70.5 Peak 83.3 UWPk 92.9dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 62.0 L10 55.5 L50 48.4 L90 42.9dBA

INTV 9 30Oct1998 02:00:00 Duration 1:00:00
Leq 52.3 SEL 87.9 Min 37.4 Max 69.9 Peak 85.3 UWPk 89.8dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 62.5 L10 55.8 L50 47.3 L90 42.1dBA

INTV 10 30Oct1998 03:00:00 Duration 1:00:00
Leq 52.4 SEL 88.0 Min 38.4 Max 66.2 Peak 78.6 UWPk 88.5dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 61.8 L10 56.0 L50 48.6 L90 43.0dBA

INTV 11 30Oct1998 04:00:00 Duration 1:00:00
Leq 54.6 SEL 90.2 Min 39.3 Max 66.6 Peak 79.6 UWPk 89.8dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 63.0 L10 58.8 L50 51.4 L90 46.4dBA

INTV 12 30Oct1998 05:00:00 Duration 1:00:00
Leq 57.4 SEL 93.0 Min 45.5 Max 69.4 Peak 82.9 UWPk 88.5dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 64.4 L10 60.8 L50 55.7 L90 51.1dBA

INTV 13 30Oct1998 06:00:00 Duration 1:00:00
Leq 58.5 SEL 94.1 Min 48.1 Max 67.8 Peak 84.4 UWPk 89.8dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 64.4 L10 61.6 L50 57.3 L90 53.8dBA

INTV 14 30Oct1998 07:00:00 Duration 1:00:00
Leq 58.5 SEL 94.0 Min 46.3 Max 71.7 Peak 88.8 UWPk 95.2dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 64.9 L10 61.6 L50 57.1 L90 53.0dBA

INTV 15 30Oct1998 08:00:00 Duration 1:00:00
Leq 57.0 SEL 92.6 Min 44.3 Max 68.5 Peak 84.6 UWPk 88.5dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 63.4 L10 60.5 L50 55.5 L90 50.8dBA

INTV 16 30Oct1998 09:00:00 Duration 1:00:00
Leq 57.3 SEL 92.9 Min 45.1 Max 69.8 Peak 81.1 UWPk 88.5dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 63.8 L10 60.7 L50 55.8 L90 50.8dBA

INTV 17 30Oct1998 10:00:00 Duration 1:00:00
Leq 62.3 SEL 97.9 Min 45.7 Max 103.8 Peak 131.9 UWPk 131.9dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 1
L 1 64.7 L10 61.3 L50 57.1 L90 53.3dBA

INTV 18 30Oct1998 11:00:00 Duration 1:00:00
Leq 57.2 SEL 92.8 Min 43.5 Max 68.6 Peak 94.7 UWPk 95.2dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 63.3 L10 60.3 L50 55.9 L90 52.2dBA

INTV 19 30Oct1998 12:00:00 Duration 1:00:00
Leq 72.6 SEL 108.2 Min 45.0 Max 103.3 Peak 124.7 UWPk 124.9dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 77.1 L10 60.6 L50 56.2 L90 52.9dBA

INTV 20 30Oct1998 13:00:00 Duration 1:00:00
Leq 72.9 SEL 108.4 Min 44.5 Max 102.8 Peak 123.6 UWPk 124.0dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 81.1 L10 60.4 L50 55.0 L90 51.8dBA

INTV 21 30Oct1998 14:00:00 Duration 1:00:00
Leq 56.5 SEL 92.1 Min 47.6 Max 72.5 Peak 85.3 UWPk 95.2dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 62.6 L10 59.1 L50 55.4 L90 52.0dBA

INTV 22 30Oct1998 15:00:00 Duration 1:00:00
Leq 69.7 SEL 105.3 Min 48.4 Max 102.5 Peak 123.4 UWPk 124.3dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 71.5 L10 59.6 L50 56.0 L90 53.1dBA

INTV 23 30Oct1998 16:00:00 Duration 1:00:00
Leq 67.0 SEL 102.6 Min 48.1 Max 100.5 Peak 120.5 UWPk 120.9dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 69.7 L10 60.2 L50 56.8 L90 53.5dBA

INTV 24 30Oct1998 17:00:00 Duration 1:00:00
Leq 65.6 SEL 101.1 Min 52.7 Max 101.8 Peak 122.3 UWPk 123.1dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 69.0 L10 62.0 L50 59.3 L90 57.0dBA

LOCATION 2: Residence along Monterey Frontage Rd.

INTV 1 30Oct1998 17:00:00 Duration 1:00:00
Leq 68.7 SEL 93.7 Min 56.8 Max 86.0 Peak 101.4 UWPk 105.9dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 78.7 L10 71.6 L50 65.6 L90 60.4dBA

INTV 2 30Oct1998 18:00:00 Duration 1:00:00
Leq 67.0 SEL 102.6 Min 54.9 Max 81.9 Peak 97.0 UWPk 101.0dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 75.3 L10 70.4 L50 64.6 L90 60.1dBA

INTV 3 30Oct1998 19:00:00 Duration 1:00:00
Leq 64.8 SEL 100.4 Min 52.5 Max 77.8 Peak 91.5 UWPk 101.4dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 72.4 L10 68.5 L50 62.2 L90 58.4dBA

INTV 4 30Oct1998 20:00:00 Duration 1:00:00
Leq 64.0 SEL 99.6 Min 54.9 Max 76.4 Peak 90.2 UWPk 99.6dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 72.0 L10 67.3 L50 61.8 L90 59.0dBA

INTV 5 30Oct1998 21:00:00 Duration 1:00:00
Leq 65.7 SEL 101.3 Min 53.9 Max 90.8 Peak 111.6 UWPk 113.5dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 72.9 L10 66.6 L50 61.5 L90 58.5dBA

INTV 6 30Oct1998 22:00:00 Duration 1:00:00
Leq 63.6 SEL 99.2 Min 54.1 Max 77.7 Peak 90.8 UWPk 96.5dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 71.3 L10 66.6 L50 61.6 L90 58.3dBA

INTV 7 30Oct1998 23:00:00 Duration 1:00:00
Leq 62.6 SEL 98.2 Min 51.3 Max 79.4 Peak 91.1 UWPk 96.5dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 70.7 L10 65.3 L50 60.6 L90 56.9dBA

INTV 8 31Oct1998 00:00:00 Duration 1:00:00
Leq 62.6 SEL 98.2 Min 47.7 Max 85.7 Peak 104.3 UWPk 109.1dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 71.9 L10 65.1 L50 58.1 L90 53.2dBA

INTV 9 31Oct1998 01:00:00 Duration 1:00:00
Leq 58.1 SEL 93.7 Min 45.3 Max 78.7 Peak 90.6 UWPk 97.9dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 69.0 L10 60.7 L50 53.7 L90 50.0dBA

INTV 10 31Oct1998 02:00:00 Duration 1:00:00
Leq 57.7 SEL 93.3 Min 43.9 Max 74.6 Peak 88.4 UWPk 93.0dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 69.2 L10 60.5 L50 53.0 L90 48.8dBA

INTV 11 31Oct1998 03:00:00 Duration 1:00:00
Leq 56.4 SEL 92.0 Min 42.6 Max 73.7 Peak 89.8 UWPk 94.1dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 68.1 L10 58.6 L50 52.2 L90 47.5dBA

INTV 12 31Oct1998 04:00:00 Duration 1:00:00
Leq 55.9 SEL 91.5 Min 41.6 Max 79.8 Peak 90.6 UWPk 100.1dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 65.9 L10 57.9 L50 53.1 L90 47.6dBA

INTV 13 31Oct1998 05:00:00 Duration 1:00:00
Leq 57.8 SEL 93.3 Min 44.0 Max 77.2 Peak 89.0 UWPk 97.2dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 69.4 L10 59.8 L50 53.0 L90 48.1dBA

INTV 14 31Oct1998 06:00:00 Duration 1:00:00
Leq 61.3 SEL 96.8 Min 48.2 Max 78.1 Peak 89.7 UWPk 100.1dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 70.9 L10 64.2 L50 58.0 L90 53.7dBA

INTV 15 31Oct1998 07:00:00 Duration 1:00:00
Leq 63.3 SEL 98.9 Min 49.8 Max 82.8 Peak 97.5 UWPk 102.2dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 72.7 L10 66.2 L50 59.3 L90 55.5dBA

INTV 16 31Oct1998 08:00:00 Duration 1:00:00
Leq 63.8 SEL 99.3 Min 50.9 Max 81.8 Peak 94.5 UWPk 101.4dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 73.8 L10 66.9 L50 59.7 L90 55.5dBA

INTV 17 31Oct1998 09:00:00 Duration 1:00:00
Leq 64.7 SEL 100.3 Min 49.4 Max 84.4 Peak 97.8 UWPk 104.8dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 75.9 L10 67.6 L50 60.0 L90 55.4dBA

INTV 18 31Oct1998 10:00:00 Duration 1:00:00
Leq 64.9 SEL 100.4 Min 50.0 Max 84.8 Peak 97.2 UWPk 105.1dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 74.6 L10 68.1 L50 60.8 L90 56.2dBA

INTV 19 31Oct1998 11:00:00 Duration 1:00:00
Leq 64.7 SEL 100.3 Min 48.7 Max 82.1 Peak 95.9 UWPk 102.2dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 73.9 L10 67.8 L50 61.9 L90 58.0dBA

INTV 20 31Oct1998 12:00:00 Duration 1:00:00
Leq 66.5 SEL 102.0 Min 53.6 Max 88.9 Peak 100.6 UWPk 103.9dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 76.5 L10 68.7 L50 62.2 L90 58.6dBA

INTV 21 31Oct1998 13:00:00 Duration 1:00:00
Leq 65.6 SEL 101.1 Min 49.6 Max 84.6 Peak 95.6 UWPk 105.7dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 75.6 L10 68.5 L50 61.6 L90 56.6dBA

INTV 22 31Oct1998 14:00:00 Duration 1:00:00
Leq 65.3 SEL 100.9 Min 51.8 Max 84.1 Peak 101.5 UWPk 107.1dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 74.7 L10 68.4 L50 61.6 L90 57.4dBA

INTV 23 31Oct1998 15:00:00 Duration 1:00:00
Leq 64.4 SEL 100.0 Min 51.2 Max 82.3 Peak 97.0 UWPk 100.5dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 73.8 L10 67.6 L50 61.1 L90 56.8dBA

INTV 24 31Oct1998 16:00:00 Duration 1:00:00
Leq 64.9 SEL 100.4 Min 54.6 Max 79.5 Peak 93.3 UWPk 101.4dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 72.8 L10 68.3 L50 62.5 L90 59.3dBA

INTV 25 31Oct1998 17:00:00 Duration 1:00:00
Leq 64.9 SEL 99.4 Min 53.3 Max 79.1 Peak 91.4 UWPk 97.9dB
Excd's: RMS 0 Peak 0 UWPk 0 Ovlds 0
L 1 72.8 L10 68.5 L50 62.5 L90 58.9dBA

Edward L. Pack Associates, Inc.

DNL CALCULATIONS

CLIENT: EMC PLANNING GROUP INC.
FILE: 30-081
PROJECT: GILROY SPORTS PARK EIR
DATE: 10/28-31/98
SOURCE: FARMAN LN. & MONTEREY FRONTAGE RD.

LOCATION 1 FARMAN LANE 10/29 - 10/30
d to Source = 55 ft. to Monterey Frontage CL & 10 ft. to Farman CL

TIME	Leq	10^Leq/10		
7:00 a.m.	58.50	707945.78		
8:00 a.m.	57.00	501187.23		
9:00 a.m.	57.30	537031.80		
10:00 a.m.	62.30	1698243.65		
11:00 a.m.	57.20	524807.46		
12:00 noon	72.60	18197008.59		
1:00 p.m.	72.90	19498446.00		
2:00 p.m.	56.50	446683.59		
3:00 p.m.	69.70	9332543.01	Daytime Component	
4:00 p.m.	67.00	5011872.34	SUM=	62472055.04
5:00 p.m.	65.60	3630780.55	Ld=	66.20
6:00 p.m.	59.60	912010.84		
7:00 p.m.	57.30	537031.80		
8:00 p.m.	56.90	489778.82		
9:00 p.m.	56.50	446683.59		
10:00 p.m.	55.10	323593.66		
11:00 p.m.	55.10	323593.66		
12:00 mdnt	54.00	251188.64		
1:00 a.m.	52.30	169824.37		
2:00 a.m.	52.30	169824.37		
3:00 a.m.	52.40	173780.08		
4:00 a.m.	54.60	288403.15	Nighttime Component	
5:00 a.m.	57.40	549540.87	SUM=	2957694.58
6:00 a.m.	58.50	707945.78	Ln=	55.17
	Daytime Level=	78.00		
	Nighttime Level=	74.67		
	DNL=	**65.85**		
	24-Hour Leq=	64.36		

LOCATION 2 MONTEREY FRONTAGE ROAD 10/30 - 10/31
d to Source = 27 ft. to Monterey Frontage CL & 210 ft. - corner house closest w

TIME	Leq	10^Leq/10		
7:00 a.m.	63.30	2137962.09		
8:00 a.m.	63.80	2398832.92		
9:00 a.m.	64.70	2951209.23		
10:00 a.m.	64.90	3090295.43		
11:00 a.m.	64.70	2951209.23		
12:00 noon	66.50	4466835.92		
1:00 p.m.	65.60	3630780.55		
2:00 p.m.	65.30	3388441.56		
3:00 p.m.	64.40	2754228.70	Daytime Component	
4:00 p.m.	64.90	3090295.43	SUM=	48209449.27
5:00 p.m.	64.90	3090295.43	Ld=	65.07
6:00 p.m.	67.00	5011872.34		
7:00 p.m.	64.80	3019951.72		
8:00 p.m.	64.00	2511886.43		
9:00 p.m.	65.70	3715352.29		
10:00 p.m.	63.60	2290867.65		
11:00 p.m.	62.60	1819700.86		
12:00 mdnt	62.60	1819700.86		
1:00 a.m.	58.10	645654.23		
2:00 a.m.	57.70	588843.66		
3:00 a.m.	56.40	436515.83		
4:00 a.m.	55.90	389045.14	Nighttime Component	
5:00 a.m.	57.80	602559.59	SUM=	9941850.70
6:00 a.m.	61.30	1348962.88	Ln=	60.43
	Daytime Level=	76.87		
	Nighttime Level=	79.93		
	DNL=	**67.88**		
	24-Hour Leq=	63.84		

FINAL REPORT

TRANSPORTATION IMPACT ANALYSIS

GILROY SPORTS PARK
(Gilroy, California)

Prepared for:
EMC Planning Group, Inc.

Prepared by:
Fehr & Peers Associates, Inc.

January 1999

Final Report

TRANSPORTATION IMPACT ANALYSIS

for the

GILROY SPORTS PARK
(Gilroy, California)

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January 1999

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EXECUTIVE SUMMARY

This report presents the results of the Transportation Impact Analysis (TIA) conducted for the proposed Gilroy Sports Park in Gilroy, California. The project site is located on the west side of Monterey Street, south of Thomas Road/Luchessa Avenue,[1] and is bounded on the west and south by Uvas Creek. The purpose of the analysis is to identify the likely transportation impacts of the proposed development on the surrounding roadway system and to identify improvements to mitigate significant impacts.

The proposed development is for a park containing 10 softball fields, three baseball fields, seven soccer fields (which are overlaid on the ball fields), a commercial recreation area, and a park area. The commercial recreation area will house a community meeting room and has the potential to house additional indoor athletic activities (roller hockey, indoor soccer, and BMX). The park area includes picnic areas, children's play areas, two sand volleyball courts, six bocce ball courts, and six horseshoe pits. The project will be developed in nine phases. Direct access to the project site will be provided via a main entryway on Farman Frontage Road (formerly Monterey Frontage Road).

The impacts of the proposed project were estimated following guidelines of the City of Gilroy and the Santa Clara Valley Transportation Authority (VTA), which is the congestion management agency for Santa Clara County. The project is not estimated to add traffic volumes that exceed the CMP threshold for analysis at CMP intersections or on freeway segments near the site during the AM or PM Peak hours. The operations of the intersections of Monterey Street with Farman Frontage Road, Thomas Road/Luchessa Avenue with Princevalle Street, and Thomas Road/Luchessa Avenue with Church Street were evaluated. All of these intersections are unsignalized under Existing Conditions. Signalization of the intersection of Monterey Street and Farman Frontage Road is proposed as part of the final phase of the Gilroy Sports Park. The methodology presented in the *1994 Highway Capacity Manual* (1994 HCM) for two-way stop-controlled intersections was used to evaluate the unsignalized intersections. Under signalized conditions, the intersection of Monterey Street and Farman Frontage Road was evaluated using the approved CMP methodology. This methodology has also been adopted by the City of Gilroy. The operation of the key intersections were evaluated during the evening (PM) and Saturday peak hours under Existing, Background, Project, and Cumulative Conditions.

The amount of traffic generated by the proposed development was based on the planned operation of the park. The project, as proposed, is estimated to add 550 PM peak-hour trips (275

[1]The City of Gilroy is in the process of changing the name of Thomas Road between Monterey Street and its intersection with Luchessa Avenue in the west to Luchessa Avenue. The north/south segment of the street between Santa Teresa Boulevard and Luchessa Avenue will remain Thomas Road.

inbound/275 outbound) and 800 Saturday peak-hour trips (400 inbound/400 outbound) to the surrounding roadways. The project-generated traffic was assigned to specific roadway segments, intersections, and turning movements based on existing travel patterns in the vicinity of the site and the relative locations of complementary land uses.

Using existing counts, estimate traffic projections for approved and pending developments in the area, intersection lane configurations, signal phasings and timings, and the project-generated trips, level of service calculations were conducted for Existing, Background, Project, and Cumulative Conditions. The results of the level of service calculations are presented in Table ES-1.

The level of service calculation results indicate that the project will have a significant adverse impact on the intersection of Monterey Street and Farman Frontage Road. The installation of the proposed traffic signal at this intersection will mitigate the project's impacts and provide LOS C operations during both the PM and Saturday peak hours. Installation of the traffic signal will be needed prior to the completion of Phase IV of the proposed Sports Park. Caltrans' Peak Hour Volume Warrant for signal installation will be satisfied with the addition of traffic volumes estimated for the development of Phases I through IV of the proposed park. It is recommended that a separate eastbound left-turn lane be provided to serve the traffic added to the eastbound to northbound left-turn movement by the project. The project is estimated to have an insignificant impact on the operations of the intersections of Princevalle Street and Thomas Road/Luchessa Avenue and Church Street and Thomas Road/Luchessa Avenue. The intersection of Thomas Road/Luchessa Avenue and Princevalle Street is projected to continue to operate at an acceptable level with the addition of project traffic through buildout, as well as under Cumulative Conditions. The worst case approach, the southbound Princevalle Street approach, is projected to operate at LOS C. The intersection of Thomas Road/Luchessa Avenue with Church Street is also projected to operate at an acceptable level through Cumulative Conditions, with its worst case approach, southbound Church Street, operating at LOS C or better.

Potential project impacts on area freeway segments were evaluated. The project is not estimated to add sufficient traffic to the nearby segments of U.S. 101 to cause a significant impact according to the criteria established in the Santa Clara County CMP.

Recommendations were made in regard to other improvements proposed by the project, including:

- It is recommended that the crosswalk across Monterey Street at Farman Frontage Road not be provided until the traffic signal is installed at this intersection. The

Table ES-1

Intersection Level of Service Summary

Scenario	Peak Hour	Intersection Average Delay[1]	Intersection LOS[2]	Worst Case Approach Average Delay	Worst Case Approach LOS
Thomas Road/Luchessa Avenue and Princevalle Street					
Existing Conditions	PM	1.2	A	4.8	A
	Sat	0.9	A	4.1	A
Background Conditions (Existing Conditions + Approved Projects)	PM	1.2	A	5.5	B
	Sat	0.8	A	4.7	A
Project Conditions (Existing Conditions + Approved Projects + Project Buildout)	PM	1.6	A	8.1	B
	Sat	1.3	A	8.0	B
Cumulative Conditions (Project Conditions + Other Pending Projects)	PM	1.7	A	8.3	B
	Sat	1.3	A	8.2	B
Thomas Road/Luchessa Avenue and Church Street					
Existing Conditions	PM	0.8	A	5.1	B
	Sat	0.9	A	3.8	A
Background Conditions (Existing Conditions + Approved Projects)	PM	0.8	A	5.8	B
	Sat	0.8[3]	A	4.2	A
Project Conditions (Existing Conditions + Approved Projects + Project Buildout)	PM	1.5	A	11.1	C
	Sat	1.6	A	9.8	B
Cumulative Conditions (Project Conditions + Other Pending Projects)	PM	1.7	A	12.1	C
	Sat	2.1	A	11.5	C
Monterey Street and Farman Frontage Road					
Existing Conditions	PM	0.6	A	9.2	B
	Sat	0.2	A	6.0	B
Background Conditions (Existing Conditions + Approved Projects)	PM	0.8	A	11.2	C
	Sat	0.5	A	7.5	B
Project Conditions (Existing Conditions + Approved Projects + Project Buildout)[3]	PM	60.0	F[4]	266.3	F[4]
	Sat	117.1	F[4]	407.9	F[4]
Cumulative Conditions (Project Conditions + Other Pending Projects)	PM	116.9	F[4]	560.6	F[4]
	Sat	241.4	F[4]	934.1	F[4]

Notes:
[1] Average total intersection delay for unsignalized intersection, expressed in seconds per vehicle.
[2] LOS calculations performed using the CMP level of service analysis program, TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections.
[3] The majority of traffic added to this intersection by approved projects is to the uncontrolled through movements on Thomas Road/Luchessa Avenue, which experience no delay. Therefore, the addition of traffic to these movements results in a small decrease in overall average intersection delay.
[4] With installation of a traffic signal, intersection operations are projected to be LOS C during both the PM and Saturday peak hours.

high travel speeds on Monterey Street (in excess of 50 mph) and the width of the street (120 feet) make it hazardous for pedestrians to cross without the protection of a traffic signal.

- The proposed Farman Frontage Road bus stop should be designed to VTA standards. Pedestrian access should be provided from the bus stop to along Farman Frontage Road that connects to the internal pedestrian paths.

- The proposed sidewalk along the west side of Monterey Street should connected to and coordinated with the City's improvement plans for the intersection of Thomas Road/Luchessa Avenue and Monterey Street (which include traffic signal installation and pedestrian signals). It is recommended that the sidewalks along Monterey Street be installed when the other improvements (i.e., the installation of the traffic signal) occur at the Monterey Street/Farman Road intersection prior to Phase IV.

- Due to travel speeds along Thomas Road/Luchessa Avenue (in excess of 40 mph), a crosswalk is not recommended without the protection of a traffic signal with pedestrian heads for pedestrian crossing or all-way stop sign control (stop signs on all three intersection approaches). The recommended pedestrian and bicycle facility is the connection of the existing trail north of Thomas Road/Luchessa Avenue with the proposed trail to the south via the future under-crossing of the Thomas Road/Luchessa Avenue bridge. It is recommended that this location be monitored for both vehicular and pedestrian/bicycle volumes, and an all-way stop or traffic signals (with pedestrian heads) be installed if warrant requirements are met.

Site access, on-site circulation and parking were assessed. The proposed parking supply of 1,049 was found to be adequate to serve the estimated demand. However, a shortfall is projected to occur after the completion of Phase V. It is recommended that 180 of the 298 parking spaces that will be constructed with Phase VI be constructed instead with Phase V to offset the projected shortfall.

Site access was found to be adequate, with sufficient storage provided for queued vehicles between Farman Frontage Road and the main entry building, where a parking fee will be collected.

On-site circulation was reviewed and generally found to be adequate. The following recommendation were made:

- The outbound lanes of the entry road near Farman Frontage Road should be narrowed to one lane with paint to allow two outbound lanes (with park personnel directing traffic), if needed.

- All-way stop sign control is recommended at the intersection of the entry road and the main north-south road. All-way stop sign control will provide safer conditions for pedestrians crossing this intersection.

- It is recommended that the first driveway on the entrance road (closest to Farman Frontage Road) be widened to allow both inbound and outbound traffic and the landscape median along the entry road be cut back to allow left turns from this parking area onto the entry road. Currently, the on-site traffic is concentrated at the intersection of the entry road and the main north-south circulation road. Allowing left turns out of the eastern most driveway will diffuse some of this traffic. Landscaping in the median should be low (two to 2.5 feet in height) or taller trees with thin trunks, which should be pruned to maintain adequate sight distance.

- The provision of an additional north-south circulation aisle in the western-most parking area to break-up the long rows of parking spaces is recommended. In addition, the parking bays and circulation aisles should be extended eastward, eliminating the isolated landscaped barrier at the east end of the parking area.

CHAPTER 1 - INTRODUCTION

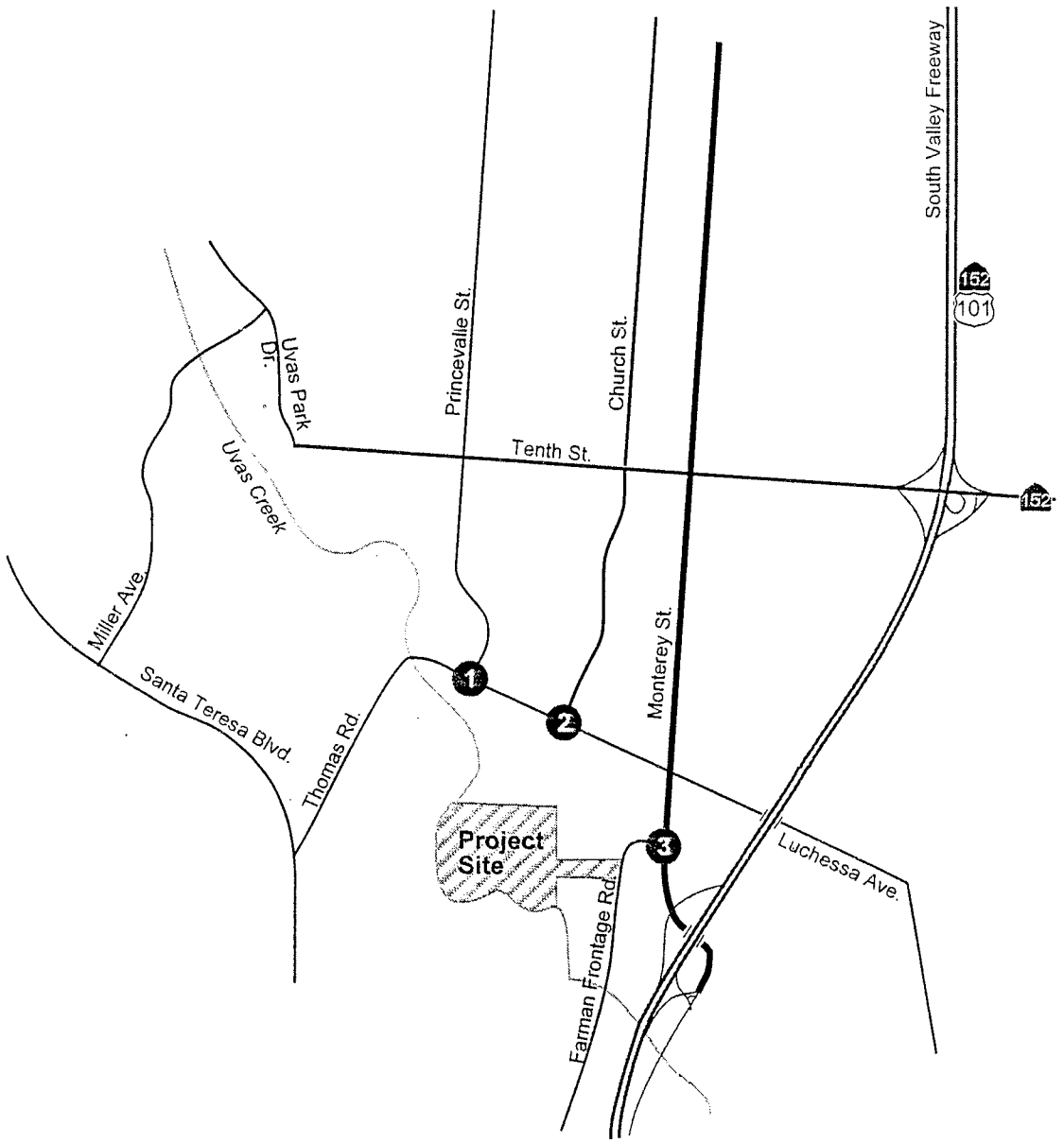
This report presents the results of the Transportation Impact Analysis (TIA) conducted for the proposed Gilroy Sports Park in Gilroy, California. The project site is located on the west side of Monterey Street, south of Thomas Road/Luchessa Avenue,[1] and is bounded on the west and south by Uvas Creek. The site location and surrounding roadway network are presented on Figure 1.

The proposed project is the development of a park containing 10 softball fields, three baseball fields, seven soccer fields (which are overlaid on the ball fields), a commercial recreation area, and a park area. The commercial recreation area will house a community meeting room and has the potential to house additional indoor athletic activities (roller hockey, indoor soccer, and BMX). The park area includes picnic areas, children's play areas, two sand volleyball courts, six bocce ball courts, and six horseshoe pits. The project's Master Plan indicates that it will be developed in nine phases, as follows:

Phase I - Utility infrastructure, entrance, corporation yard, and Uvas Creek Trail extension (rough grading)
Phase II - Two premier Little League fields (over-laid with one soccer field), parking, and Uvas Creek Trail extension
Phase III - One ball field (over-laid with one soccer field) and commercial recreation
Phase IV- North multi-use field area and parking (four softball fields over-laid with two soccer fields)
Phase V- South multi-use field area and parking (four softball fields over-laid with two soccer fields)
Phase VI- One premier softball/baseball field (overlaid with one soccer field)
Phase VII- Informal recreation area (park area with volley ball and bocce ball courts and horseshoe pits)
Phase VIII- Farman Frontage Road improvements
Phase IX- Uvas Creek Trail extension to Gavilan College

The sports park will be constructed over twenty years, with the first ballfields ready for use in Spring 2002.

[1]The City of Gilroy is in the process of changing the name of Thomas Road between Monterey Street and its intersection with Luchessa Avenue in the west to Luchessa Avenue. The north/south segment of the street between Santa Teresa Boulevard and Luchessa Avenue will remain Thomas Road.



Key:

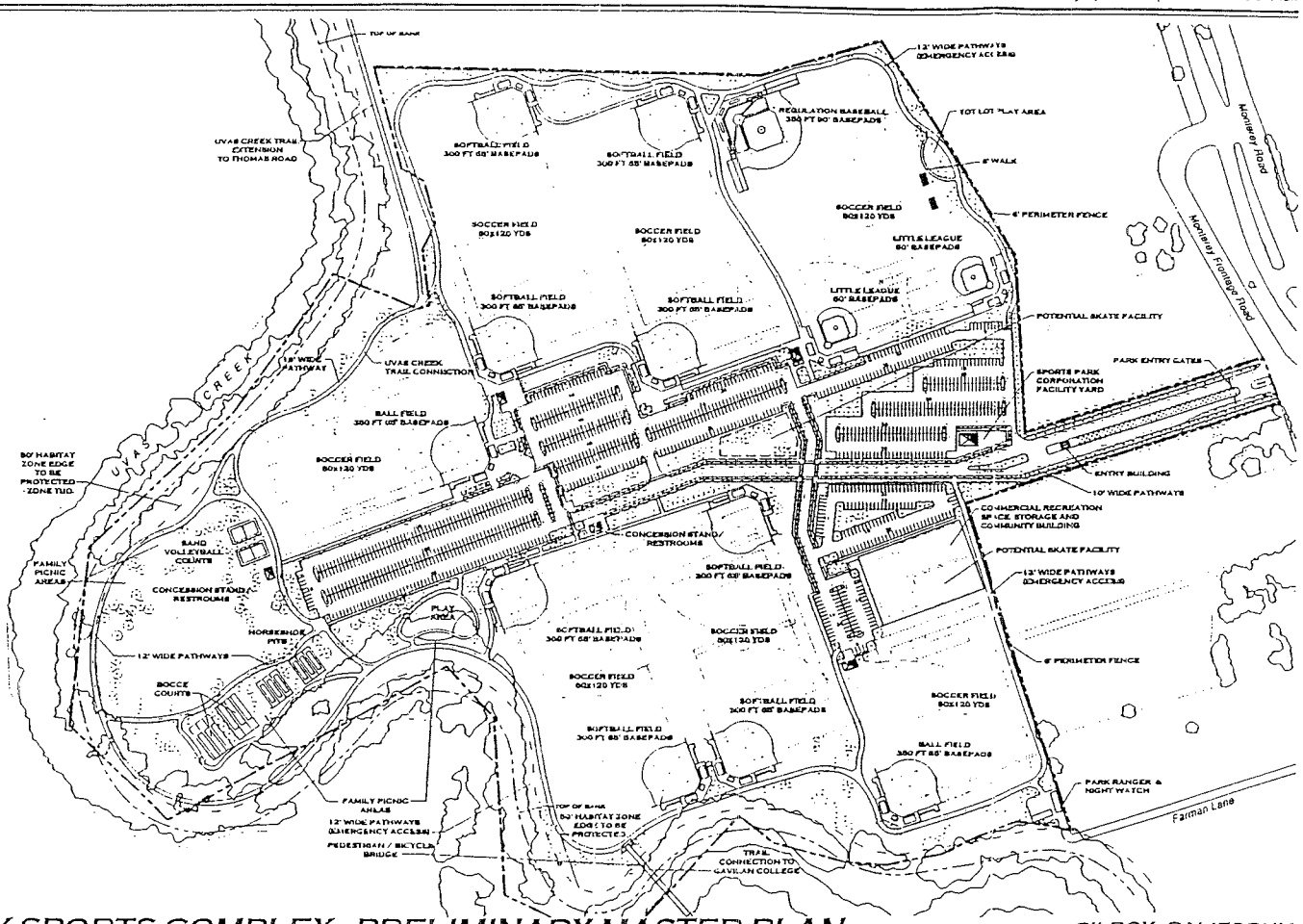
1 Study Intersection

N

Not to Scale

Figure 1 114-11-01 | **SITE LOCATION**

Gilroy Sports Complex - Draft Master Plan



GILROY SPORTS COMPLEX - PRELIMINARY MASTER PLAN

GILROY, CALIFORNIA

Beals Landscape Architecture, Inc.

June 1998

N

Not to Scale

Figure 2	SITE PLAN	
114-12-01		

The purpose of the analysis is to identify the potential impacts of the proposed development on the transportation system in the vicinity of the site. The impacts of the proposed project were estimated following the guidelines set forth by the City of Gilroy and the Santa Clara Valley Transportation Authority (VTA), which is the congestion management agency for Santa Clara County. The key intersections, Monterey Street at Farman Frontage Road, Thomas Road/Luchessa Avenue at Princevalle Street, and Thomas Road/Luchessa Avenue at Church Street, were evaluated with level of service calculations.

The operation of the key intersections were evaluated during the evening (PM) peak hour (the time period when traffic volumes on the surrounding roadways are highest) and the Saturday peak hour (the time period when project-generated traffic will be highest) for the following scenarios:

Scenario 1: *Existing Conditions.* Existing volumes obtained from counts, representing peak one-hour traffic conditions during the evening commute period and on a Saturday afternoon.

Scenario 2: *Background Conditions.* Existing peak-hour volumes plus traffic from approved but not yet constructed developments in the area.

Scenario 3a-e: *Project Conditions.* Background peak-hour volumes plus project-generated traffic estimated for the proposed development. The project was evaluated in five phases: Phase II, Phase III, Phase IV, Phase V, and Phase VI&VII (Phases I, VIII, and IX will not generated additional traffic volumes).

Scenario 4: *Cumulative Conditions.* Traffic volumes estimated for conditions with buildout of the project (Scenario 3e) plus traffic associated with pending (proposed but not approved) developments.

The AM peak hour was not analyzed since the park is estimated to generate negligible traffic volumes between 7:00 am and 9:00 am.[2]

Potential project impacts on the adjacent freeway segments and site access, on-site circulation and parking were also reviewed.

[2]Minimal activity is anticipated at the sports park during the weekday morning commute hours during the winter, spring, and fall months. Some traffic may be generated by sports camps during the summer months; however, these programs have not yet been developed.

This report is divided into seven chapters. Chapter 2 describes Existing Conditions regarding roadway facilities, transit service, bicycle and pedestrian facilities, traffic volumes, and traffic operations of the study intersections. Chapter 3 describes the approved developments in the area and traffic operations for Background Conditions. Chapter 4 describes the methodology used to estimate the project traffic and its impacts on the transportation system (intersections and freeway segments). On-site circulation, site access, and parking are also discussed in this chapter. Cumulative Conditions are presented in Chapter 5. Chapter 6 presents the conclusions of this transportation impact analysis.

CHAPTER 2 - EXISTING CONDITIONS

This chapter provides a description of Existing Conditions in terms of the roadway facilities, traffic volumes, and intersection operations.

Roadway Network

Regional access to the project site is provided by U.S. 101 and State Route 152 (SR 152), while local access is provided by Monterey Street, Farman Frontage Road, Thomas Road/Luchessa Avenue, Princevalle Street, and Church:

U.S. 101 provides access to the project site via an interchange at Monterey Street. North of its interchange with Monterey Street, U.S. 101 is a six-lane freeway, narrowing to four lanes north of Cochrane Road. South of Monterey Street, U.S. 101 becomes a four-lane highway. U.S. 101 extends northward through San Jose and San Francisco and southward through the California Central Coast.

SR 152 (Pacheco Pass Highway) connects U.S. 101 to Interstate 5 and Highway 99 in the California Central Valley. This segment of SR 152 is a two to four lanes wide. SR 152 is also designated on portions of U.S. 101, Leavesley Road, and Monterey Street. West of Monterey Street, SR 152 extends westward along First Street.

Monterey Street is, generally, a four-lane arterial through the City of Gilroy. Through downtown Gilroy (between Third and Seventh Streets), Monterey Street narrows to two travel lanes, with angled parking on the east site of the street separated from northbound through traffic by a raised median. North of the City Limits, Monterey Street becomes Monterey Road, a rural highway with four travel lanes and a center turn lane. Monterey Road continues northward into San Jose. South of its interchange with U.S. 101, Monterey Street becomes Bolsa Road. Near the project site, the speed limit on Monterey Street is 50 miles per hour (mph).

Farman Frontage Road (formerly Monterey Frontage Road) is a two-lane road that extends southward from Monterey Street, near the Monterey Street/U.S. 101 interchange, ending in a cul-de-sac south of the project site. Farman Frontage Road is a frontage road located along the west side of U.S. 101 that provides direct access to the project site (and other properties).

Thomas Road/Luchessa Avenue is a two-lane roadway, which extends northward from Santa Teresa Boulevard to Uvas Creek and then continues eastward. The City of Gilroy is currently in the process of changing the name of this roadway. The north/south segment between Santa Teresa Boulevard and Luchessa Avenue (where the road curves to the east) will remain Thomas Road. The segment from the curve to Monterey Street will be renamed Luchessa Avenue. The roadway segment east of Monterey Street is currently named Luchessa Avenue. Luchessa

Avenue terminates east of U.S. 101, east of its intersection with Rossi Lane. Near the project site, the speed limit on this roadway is 40 mph.

Princevalle Street is a two-lane residential collector street that extends southward from First Street to Luchessa Avenue.

Church Street is a two-lane street in the vicinity of the project site. Church Street extends northward from Thomas Road through downtown Gilroy to north of Farrell Avenue. Church Street, between Thomas Road/Luchessa Avenue and Farrell Avenue, is designated an arterial in the current General Plan.

Transit Service

Bus service in Santa Clara County is operated by the Santa Clara Valley Transportation Authority (VTA). Currently, there is one bus route operating within one mile of the project site, Route 68. This route operates along Princevalle Street, north of Luchessa Avenue/Thomas Road and along Thomas Road, west of Princevalle Street. Route 68 provides service between San Jose Diridon CalTrain Station and Gavilan College in Gilroy. Hours of operation are 4:30 am to 1:00 am on weekdays and 6:00 am to 12:30 am on weekends. Route 68 operates on a 15- minute headway during the commute hours and a 30- to 60-minute headway during other hours.

Commuter rail service (CalTrain) is provided from Gilroy to San Francisco by the Joint Powers Board. CalTrain provides frequent train service between San Jose and San Francisco seven days a week. Extended service is provided to Morgan Hill and Gilroy during the commute hours only. The Gilroy CalTrain station is located east of Monterey Street between Seventh and Ninth Streets.

Pedestrian and Bicycle Facilities

Pedestrian facilities comprise sidewalks, crosswalks, and pedestrian signals. Near the site, there are generally no pedestrian facilities. A sidewalk is provided along the north side of Thomas Road/Luchessa Avenue between Monterey Street and Princevalle Street, to the north of the project site. Sidewalks are not provided along Farman Frontage Road or Monterey Street.

Bicycle facilities comprise bike paths, bike lanes, and bike routes. Bike paths are paved trails that are separated from the roadways. Bike lanes are lanes on roadways that are designated for use by bicycles by striping, pavement legends, and signs. Bike routes are roadways that are designated for bicycle use with signs. Currently, no bicycle facilities directly serve the project site. There is a bike path along the eastern side of Uvas Creek between Thomas Road/Luchessa Avenue and Westwood Avenue, north of the site. Bike lanes are designated on Princevalle Street between Thomas Road/Luchessa Avenue and Sixth Street.

Existing Intersection Volumes and Lane Configurations

The operations of the key intersections were evaluated for evening (PM) and Saturday peak traffic conditions. The PM peak conditions generally occur during the evening commute hours between 4:00 to 6:00 pm on a weekday. The Saturday peak conditions generally occur between noon and 2:00 pm, based on information provided by City staff (machine counts conducted on Thomas Road/Luchessa Avenue in October 1998). Intersection operations were evaluated for the one hour during each of these periods for which the highest traffic volumes were measured. PM peak-hour traffic volumes for the intersections of Thomas Road/Luchessa Avenue at Princevalle Street and Monterey Street at Farman Frontage Road were provided by City staff from traffic counts conducted in 1998. Manual-turning movement counts were conducted on Saturday, October 24, Wednesday, December 16, and Saturday December 19, 1998 (see Appendix A) to obtain supplement this information.

Figure 3 shows the existing PM and Saturday peak-hour turning movement volumes at the key intersections. The intersection lane configurations are presented on Figure 4.

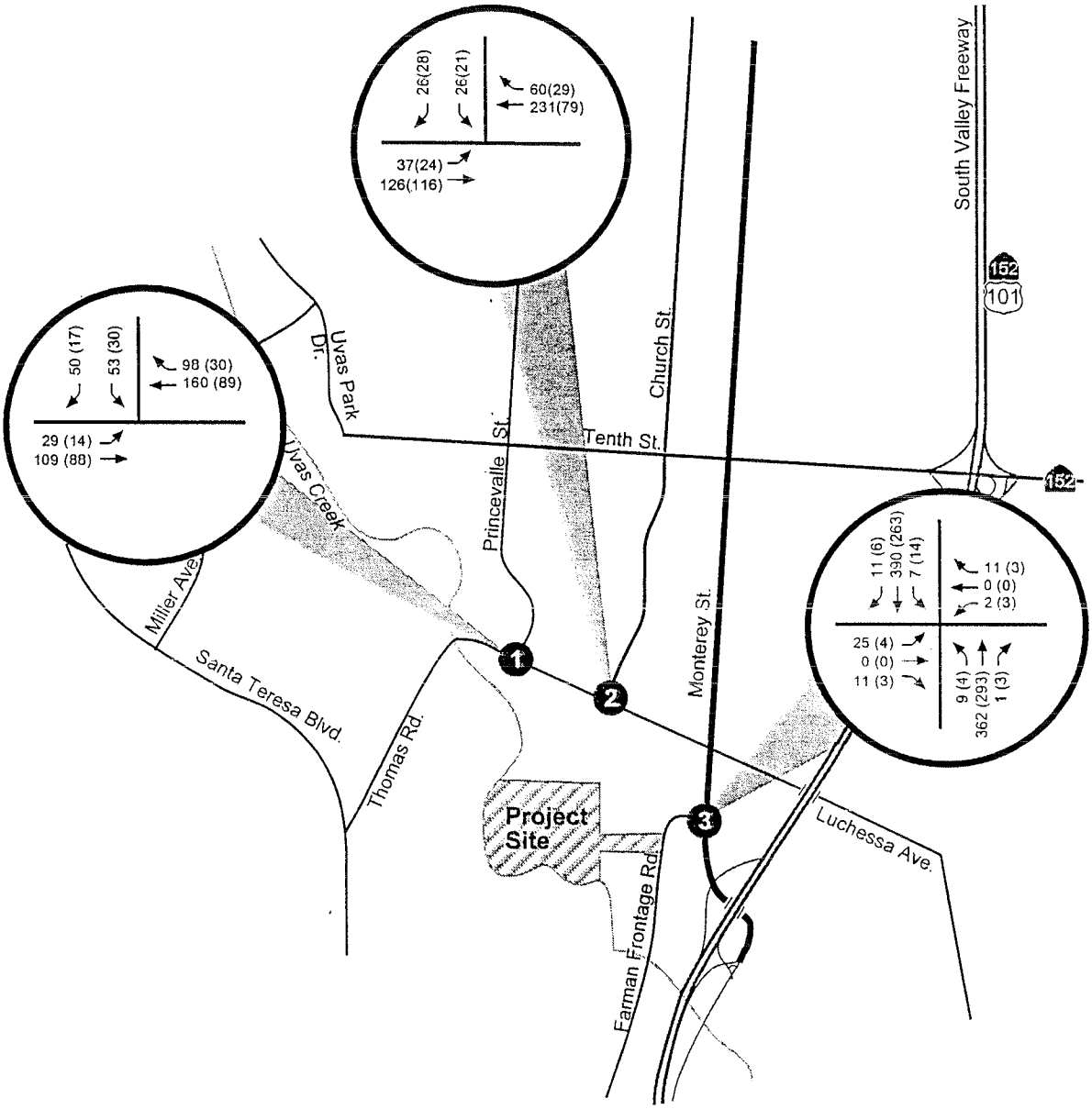
Existing Intersection Levels of Service

The operations of the key intersections were evaluated with Level of Service (LOS) calculations. *Level of Service* is a qualitative description of an intersection's operation, ranging from LOS A, or free-flow conditions, to LOS F, or over-saturated conditions. The City of Gilroy's standard for unsignalized intersections, as well as signalized intersections and roadway segments is Level of Service C.

Intersection levels of service were calculated using the methodology presented in Chapter 10 of the *1994 Highway Capacity Manual* for two-way stop-controlled intersections. This methodology evaluates an intersection's operation based on the total average delay at an intersection. The total delay for the unsignalized intersections was calculated using TRAFFIX analysis software and then correlated to a level of service. The level of service thresholds for two-way stop-controlled intersections are presented in Table 1.

Current operations of the key intersections were evaluated with the existing volumes, existing lane configurations, and signal phasings/timings used as inputs to the TRAFFIX level of service calculation program. The results are presented in Table 2, and the level of service calculation sheets are contained in Appendix B. Table 2 presents both the level of service based on the delay for all movements at the intersection and the level of service based on the worst case movement or lane group, usually the left-turn movement from the minor (stop sign-controlled) street.

The results of the LOS calculations indicate that all three intersections are operating at good levels under Existing Conditions. Overall intersection operations at the key intersections are at



Key:

1 = Study Intersection

00 (00) = PM (Saturday)

N

Not to Scale

Figure 3 — **EXISTING PEAK-HOUR TRAFFIC VOLUMES**

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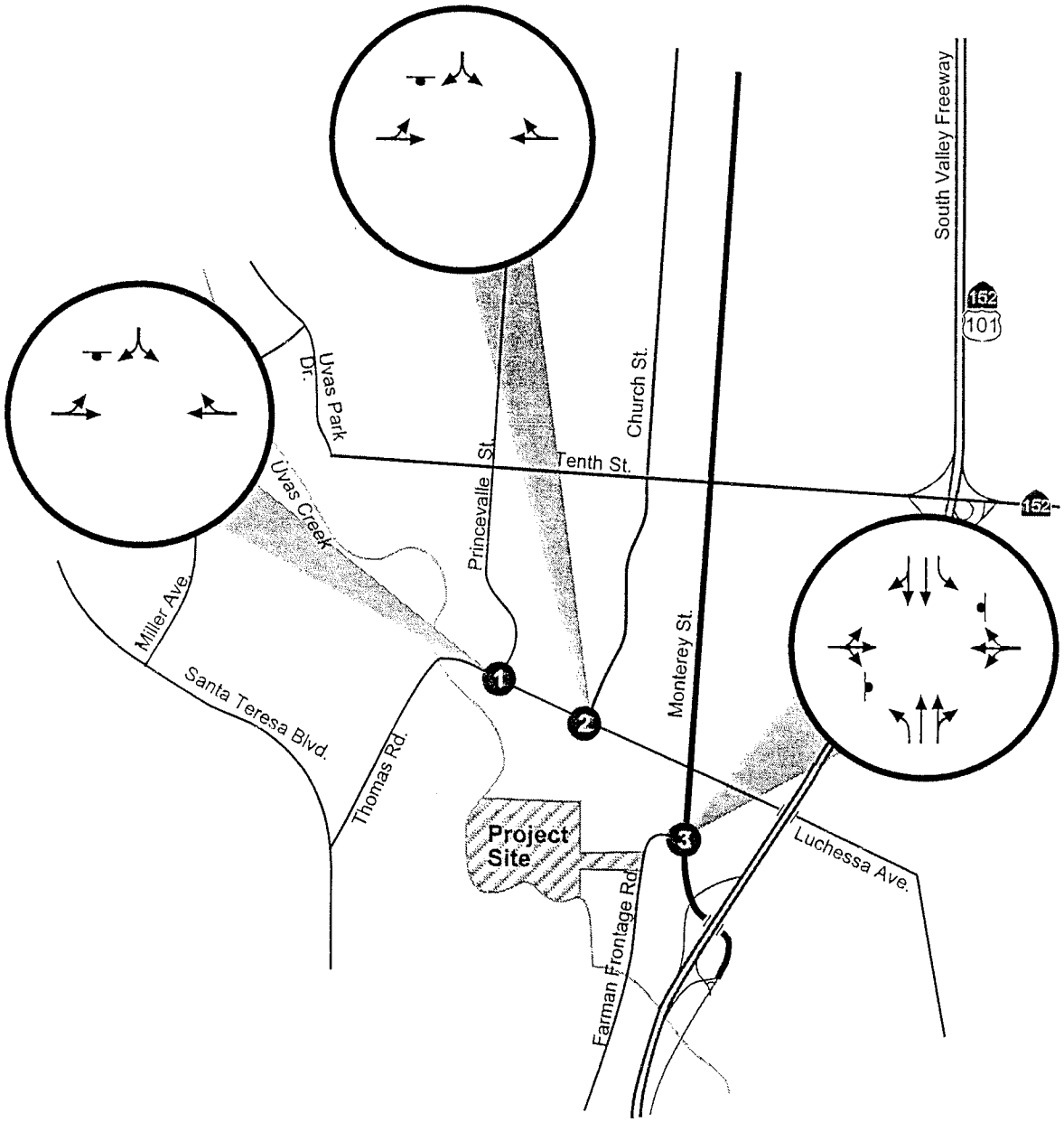


Figure 4 — **INTERSECTION LANE CONFIGURATIONS**

114-14-01

Table 1

Two-Way Stop-Controlled Intersection Level of Service Definitions Using Average Total Vehicular Delay

Level of Service	Average Total Delay Per Vehicle (Seconds)
A	≤ 5.0
B	5.1 to 10.0
C	10.1 to 20.0
D	20.1 to 30.0
E	30.1 to 45.0
F	> 45.0

Source: Transportation Research Board, *Highway Capacity Manual*, Special Report 209, 1994. p.10-12.

LOS A during the PM and Saturday peak hours. At all intersections, the minor street approaches have no separate turn lanes. The worst case movement/lane groups at the intersections of Thomas Road/Luchessa Avenue with Princevalle Street and with Church Street are the southbound approaches (Princevalle and Church Streets). The Princevalle Street southbound approach is operating at LOS A during both the PM and Saturday peak hours. The southbound Church Street approach is operating at LOS B during the PM peak hour and LOS A during the Saturday peak hour. At the Monterey Street/Farman Frontage Road intersection, the worst case approach is the eastbound (Farman Frontage Road) approach, which is currently operating at LOS B during both the PM and Saturday peak hours.

Table 2

Existing Intersection Levels of Service

Intersection	Peak Hour	Intersection Average Delay[1]	Intersection LOS [2]	Worst Case Movement Average Delay[1]	Worst Case Movement LOS [2]
Thomas Road/Luchessa Avenue and Princevalle Street	PM	1.2	A	4.8	A
	Sat	0.9	A	4.1	A
Thomas Road/Luchessa Avenue and Church Street	PM	0.8	A	5.1	B
	Sat	0.9	A	3.8	A
Monterey Street and Farman Frontage Road	PM	0.6	A	9.2	B
	Sat	0.2	A	6.0	B

Notes: [1] Average total intersection delay for unsignalized intersections expressed in seconds per vehicle.
[2] LOS calculations performed using TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections.

CHAPTER 3 - BACKGROUND CONDITIONS

This chapter discusses the operations of the key intersections under Background Conditions. Background Conditions are defined as conditions prior to completion of the proposed development. Traffic volumes for Background Conditions comprise existing volumes from counts plus traffic generated by approved developments in the area. This chapter describes the procedure used to estimate the background traffic volumes. The results of the level of service analysis for Background Conditions are also presented.

Background Traffic Estimates

The traffic volumes for Background Conditions were estimated by adding existing volumes and traffic generated by approved but not yet constructed projects in the vicinity of the site. The list of approved projects was developed with input from City of Gilroy Planning staff. The five approved developments identified in the vicinity of the project site are summarized in Table 3.

Table 3

Approved Developments

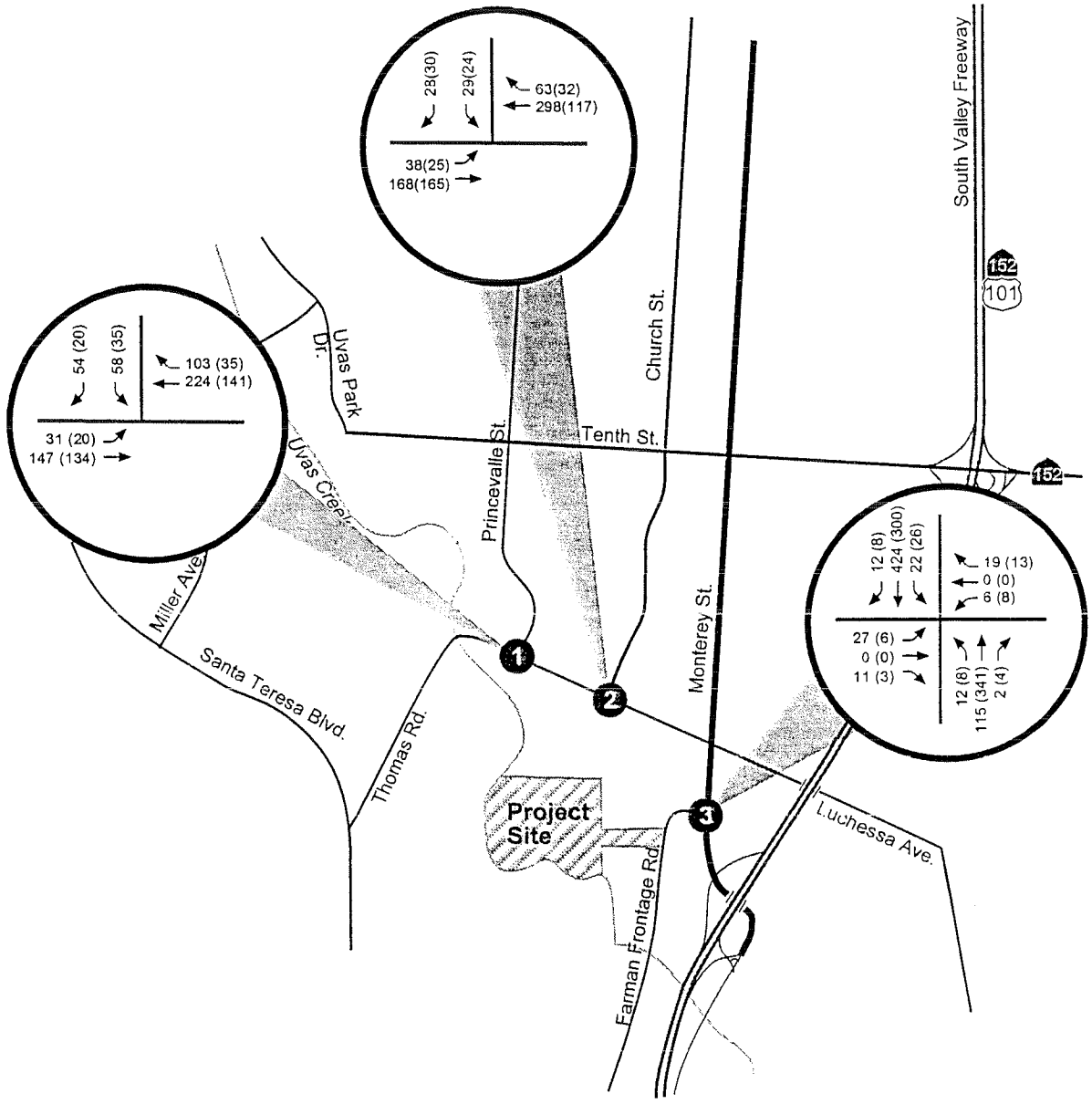
Development	Location	Use/Size
Motel 6	North of U.S. 101/Monterey Street interchange	129 rooms (replacing 56 rooms)
Truck Stop	East of U.S. 101 at Monterey Street interchange	Overnight truck stop, gas sation, convenience market, fast food restaurant, motel, and mini storage
Eagle Ridge	West side of Santa Teresa Boulevard, between Third Street and Miller Avenue	650 single-family and townhouse units, 18-hole golf-course
The Villas	West end of Oakbrook Drive, west of Thomas Road	75 single-family residential units
The Uplands	West of Thomas Road/North of Luchessa Avenue	60 single-family residential units

The trip assignments and/or trip generation and distribution information for these projects were obtained from City staff (from traffic analysis reports prepared for each development) for the PM peak hour. Traffic associated with these developments during the Saturday peak hour was estimated using trip generation rates in the Institute of Transportation Engineers *Trip Generation* (6th Edition) and the trip distribution information provided by City staff. The traffic associated with the approved developments was added to the existing volumes at the key intersections to estimate traffic volumes for Background Conditions.[3] Figure 5 illustrates the traffic volumes estimated at the key intersections for Background Conditions.

Background Intersection Level of Service

The results of the level of service calculations for Background Conditions are presented in Table 4. The LOS calculation sheets are contained in Appendix B. The results indicate that the key intersections will continue to operate at acceptable levels. The overall operating levels at all three intersections are projected to be LOS A. The worst case approach at the Thomas Road/Luchessa Avenue/Princevalle Street intersection is projected to operate at LOS B during the PM peak hour and LOS A during the Saturday peak hour. The worst case approach at the intersection of Thomas Road/Luchessa Avenue and Church Street is projected to operate at LOS B during the weekday PM peak hour and LOS A during the Saturday peak hour. At the intersection of Monterey Street and Farman Frontage Road, the operation of the worst case approach (eastbound Farman Frontage Road) is projected to deteriorate one level to LOS C during the PM peak hour and continue to operate at LOS B during the Saturday peak hour with the addition of traffic associated with already approved developments. These are acceptable operating levels.

[3]It should be noted that the Saturday peak-hour traffic estimates assume that all the uses included in the approved developments peak at the same time, producing a conservatively high estimate of Saturday peak-hour volumes.



Key:

1 = Study Intersection

00 (00) = PM (Saturday)

N

Not to Scale

Figure 5 114-15-01

BACKGROUND PEAK-HOUR TRAFFIC VOLUMES

Table 4

Background Intersection Levels of Service

Intersection	Peak Hour	Intersection Average Delay[1]	Intersection LOS [2]	Worst Case Movement Average Delay[1]	Worst Case Movement LOS [2]
Thomas Road/Luchessa Avenue and Princevalle Street	PM	1.2	A	5.5	B
	Sat	0.8	A	4.7	A
Thomas Road/Luchessa Avenue and Church Street	PM	0.8	A	5.8	B
	Sat	0.8	A	4.2	A
Monterey Street and Farman Frontage Road	PM	0.8	A	11.2	C
	Sat	0.5	A	7.5	B

Notes: [1] Average total intersection delay for unsignalized intersection expressed in seconds per vehicle.
[2] LOS calculations performed using TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections.

CHAPTER 4 - PROJECT CONDITIONS

The impacts of the proposed Gilroy Sports Park on the surrounding roadway system are discussed in this chapter. First, the methodology used to estimate the amount of traffic generated by the project is described. Then, the results of the level of service calculations for Project Conditions are presented. Project Conditions are defined as Background Conditions plus traffic generated by the proposed project. Project Conditions were evaluated in five phases. A comparison of intersection operating levels under Background and Project Conditions is then presented, and the impacts of the project on the key intersections are discussed.

The potential impacts of the project on freeway segments in the vicinity of the project site, as well as on-site circulation, site access, and parking, are also discussed in this chapter.

Project Traffic Estimates

The amount of traffic associated with the project was estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In the first step, the amounts of traffic entering and exiting the site were estimated for the two study periods. In the second step, the directions the trips use to approach and depart the site were estimated. The trips were assigned to specific street segments and intersection turning movements in the third step. The results of the process for the Gilroy Sport Park are described in the following sections.

Trip Generation

Peak-hour trip generation was estimated based on the proposed number and types of playing fields and other uses, as well as input from the project architect on the expected operation of the sports park. The trip generation estimates assumed the use of all softball/baseball fields at one time. These ball fields are overlaid with soccer fields, which would not be in use during softball or baseball games. Basing the trip generation on the use of all softball/baseball fields was more conservative than assuming the use of all soccer fields because soccer teams are likely to have slightly fewer players than softball/baseball teams (12 per team versus 15 to 18 per team) and there are fewer proposed soccer fields than ball fields (seven soccer fields versus 13 softball and baseball fields).

Trip generation estimates were first developed for the worst case condition, the Saturday peak hour. In addition to those described above, other assumptions include:

(1) 30 players per field for softball and Little League and 36 players per field for colt baseball;

(2) One spectator per player for softball and colt baseball and 35 spectators per Little League game (slightly more than one per player to reflect more parents watching their children);

(3) An auto occupancy of 2.0 persons per vehicle for softball and colt baseball and 2.1 persons per vehicle for Little League (the higher occupancy for Little League was assumed due to more parents arriving with children).

(4) Seventy five percent (75 %) of the games were assumed to begin or end during the peak hour. It was further assumed that the players and spectators associated with these games would arrive or leave during that hour.

(5) Commercial recreation, general park use, and special events were estimated to add 200 trips (50% inbound and 50% outbound) during the Saturday peak hour.

(6) PM peak-hour trip generation was assumed to be 75 % of the Saturday peak-hour trip generation for softball and baseball games and 50 % of Saturday peak-hour trip generation for general park use, commercial recreation and special events.

A summary of the trips generation estimates is contained in Appendix C, including phase by phase estimates and estimates for use of all soccer fields (for informational purposes).

The project, as proposed, is estimated to generate a total of 550 PM peak-hour trips (275 inbound and 275 outbound) and 800 Saturday peak-hour trips (400 inbound and 400 outbound). The trip generation estimates are presented in Table 5 by phase.

Table 5

Trip Generation Estimates

Phase	Use	PM Peak Hour			Saturday Peak Hour		
		In	Out	Total	In	Out	Total
I	Entry Road	0	0	0	0	0	0
II	Colt Baseball (1) Little League (2)	56	56	112	74	74	148
III	Softball (1) Commercial Recreation	34	34	68	58	58	116
IV	Softball (4)	78	78	156	110	110	220
V	Softball (4)	78	78	156	110	110	220
VI & VII	Softball (1) General Park	29	29	58	48	48	96
VIII	Other Roadway Improvements	0	0	0	0	0	0
IX	Uvas Creek Trail south	0	0	0	0	0	0
Total		275	275	550	400	400	800

Trip Distribution

The trip distribution pattern for the project was estimated based on existing travel patterns in the vicinity of the site and the relative locations of complementary land uses in the area. The major directions for project-generated traffic to approach and depart the project site are estimated to be:

30 % to and from the west on Thomas Road/Luchessa Avenue
10 % to and from the north on Princevalle Street
15 % to and from the north on Church Street
10 % to and from the north Monterey Street
20 % to and from the north on U.S. 101
10 % to and from the south U.S. 101
5 % to and from the neighborhoods north of Thomas Road/Luchessa Avenue, west of Monterey Street.
100%

The trip distribution pattern is illustrated on Figure 6.

Trip Assignment

The trips generated by the proposed Gilroy Sports Park were assigned to the roadway system based on the directions of approach and departure discussed above. Figure 7 presents the peak-hour project trip assignments by turning movement at the study intersections and on nearby roadway segments for buildout conditions. The project trips for each phase were added to the traffic volumes for Background Conditions to achieve turning-movement volumes at the key intersections for each phase of the project. The total traffic volumes under "with project" conditions are shown on Figure 8.

Project Intersection Levels of Service

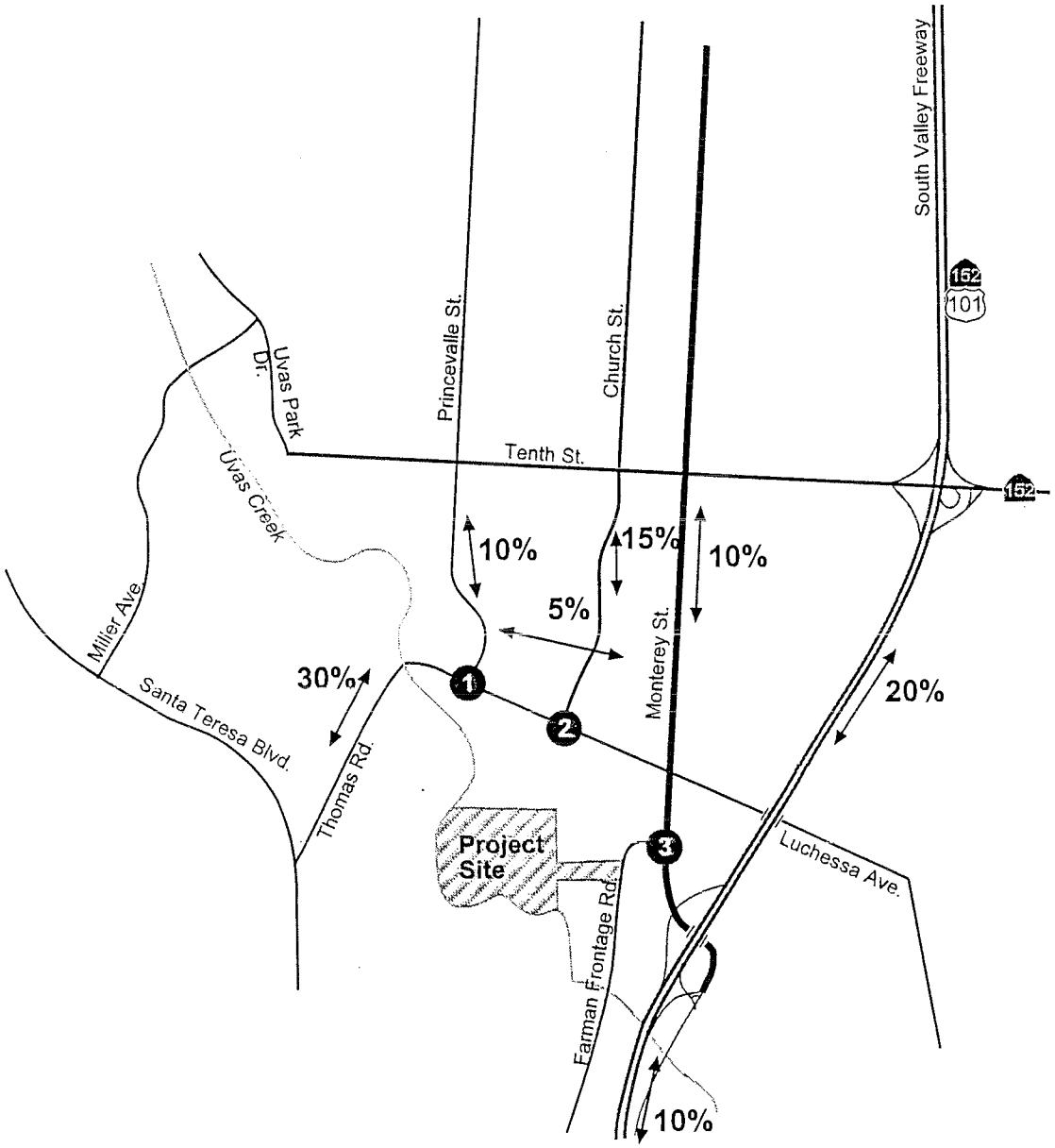
Intersection level of service calculations were conducted to evaluate the operating conditions of the key intersections with project traffic and the potential impacts of the proposed project on the local roadway system. The intersection operations was evaluated with each phase of the project.

The results of the intersection level of service calculations for Background and Project Conditions are summarized in Table 6. The intersections of Thomas Road/Luchessa Avenue with Princevalle Street and with Church Street are projected to continue to operate at acceptable levels of service (both total intersection and worse case approach) through buildout of the proposed project.

The overall intersection operations at the Monterey Street/Farman Frontage Road intersection are projected to be acceptable (LOS C or better) during both peak hours through the completion of Phase IV. With the completion of Phase V, overall intersection operations are projected to deteriorate to LOS D during the PM peak hour and LOS F during the Saturday peak hour. With the completion of Phases VI and VII, intersection operations during both peak hours are projected to be LOS F. The operations of the worst case approach, eastbound Farman Frontage Road, are projected to remain at acceptable levels during both peak hours through the completion of Phase III. With the completion of Phase IV, this approach is project to deteriorate to LOS E during the PM peak hour and LOS D during the Saturday peak hour.

Intersection Impacts

The results indicate that the project will have a significant adverse impact on the intersection of Monterey Street and Farman Frontage Road. Although overall intersection operations are projected to be LOS B during both peak hours, the addition of project generated traffic will result in the deterioration of worst case approach operations to LOS E (average total delay of 32.4



Key:

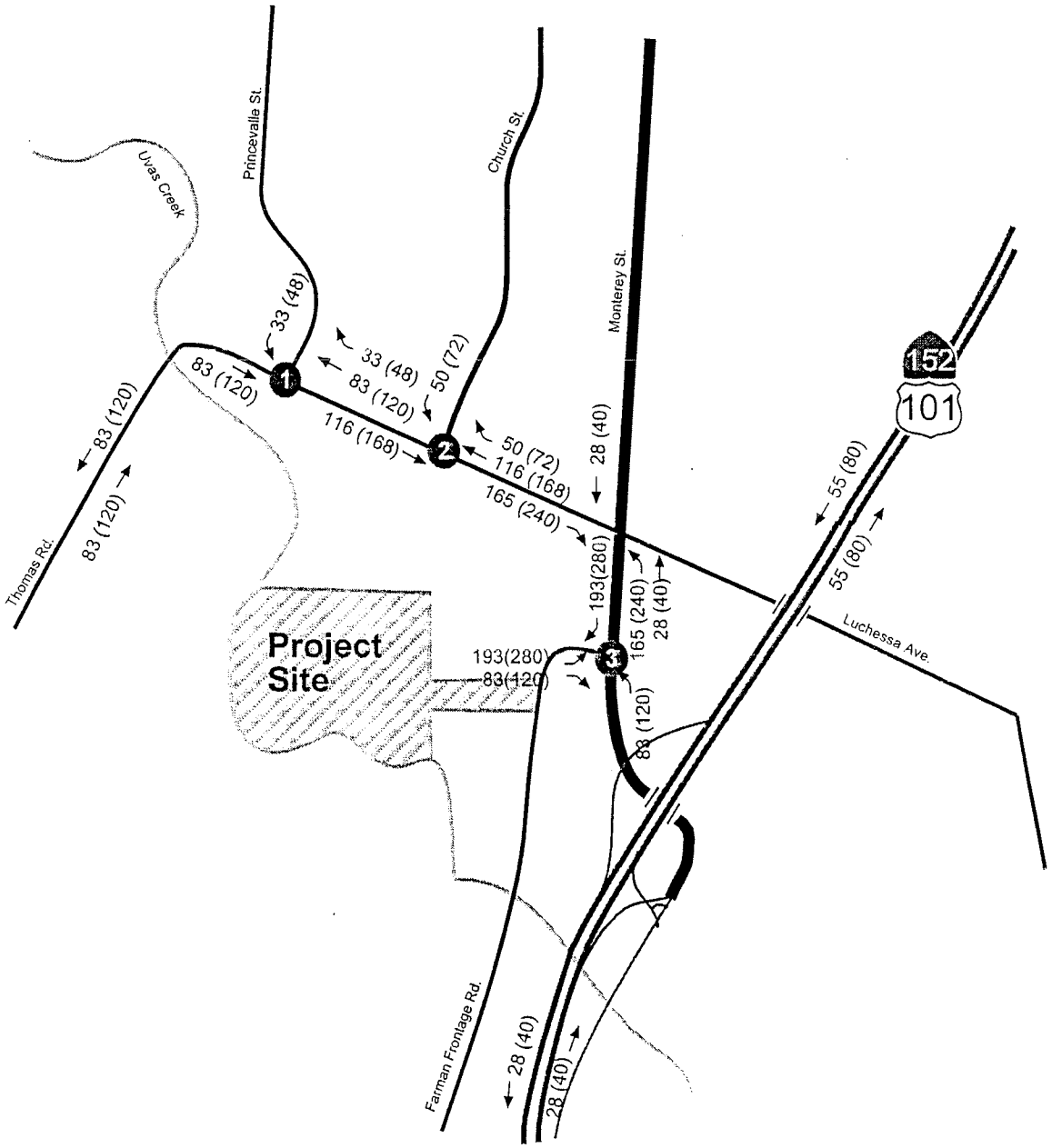
1 Study Intersection

N

Not to Scale

Figure 6 — **TRIP DISTRIBUTION PATTERN**

114-16-01

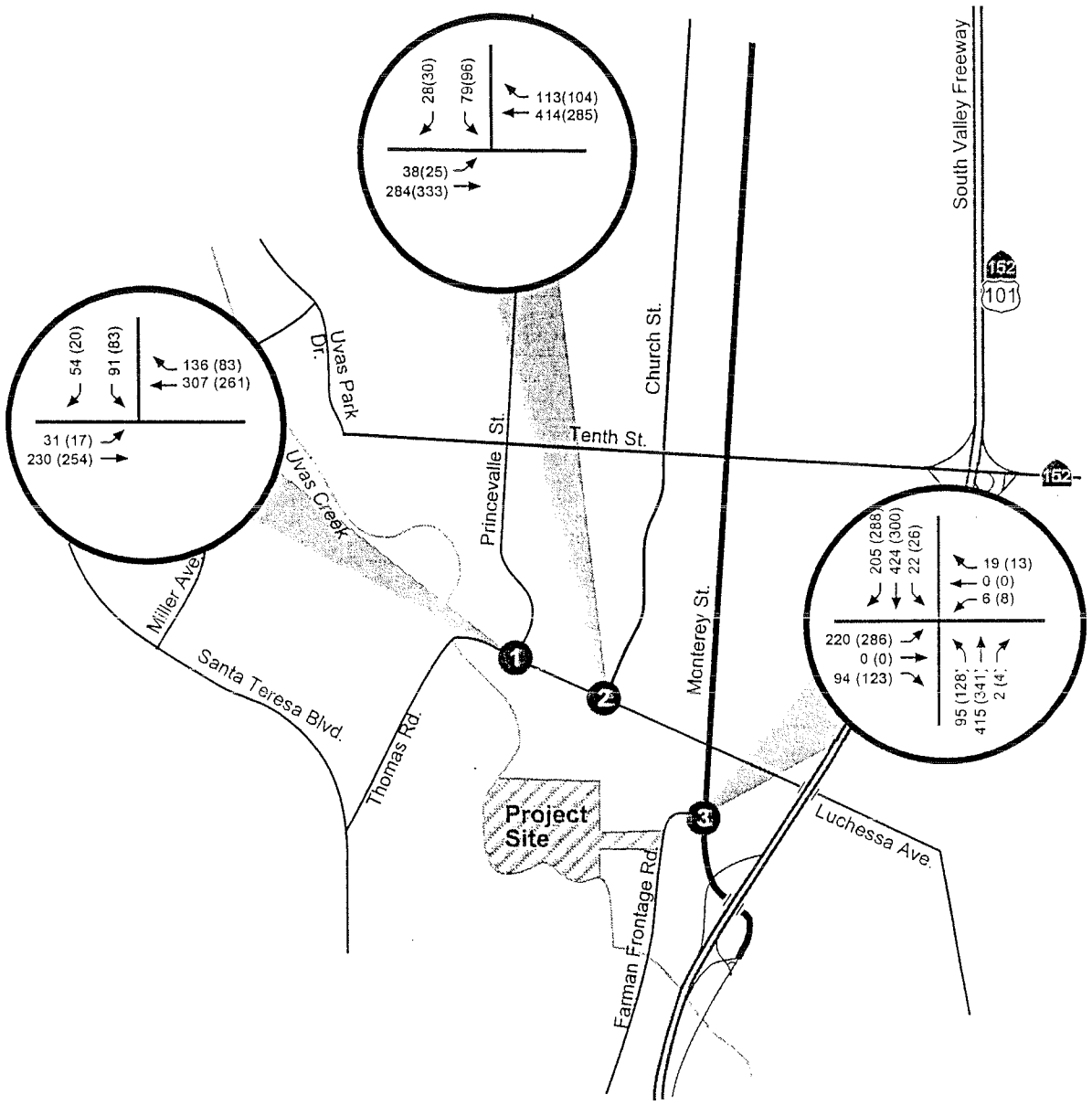


Key:
1 Study Intersection
XX (XX) = PM (Saturday)

N
Not to Scale

Figure 7 — **PEAK-HOUR PROJECT TRIP ASSIGNMENT (PROJECT BUILDOUT)**

114-17-01



Key:

1 = Study Intersection

00 (00) = PM (Saturday)

N

Not to Scale

Figure 8

114-18-01

BACKGROUND PLUS PROJECT BUILDOUT PEAK-HOUR TRAFFIC VOLUMES

Table 6

Background and Project Intersection Levels of Service

Scenario	Peak Hour	Intersection		Worst Case Movement [3]	
		Average Delay[1]	LOS[2]	Average Total Delay	LOS
Thomas Road/Luchessa Avenue and Princevalle Street					
Background Conditions (Existing Conditions + Approved Projects)	PM	1.2	A	5.5	B
	Sat	0.8	A	4.7	A
Phase II Conditions (Background Conditions + Project Phase II Traffic)[3]	PM	1.3	A	6.0	B
	Sat	0.9	A	5.1	B
Phase III Conditions (Phase II Conditions + Project Phase III Traffic)	PM	1.9	A	6.2	B
	Sat	1.0	A	5.5	B
Phase IV Conditions (Phase III Conditions + Project Phase IV Traffic)	PM	1.4	A	6.9	B
	Sat	1.1	A	6.4	B
Phase V Conditions (Phase IV Conditions + Project Phase V Traffic)	PM	1.6	A	7.8	B
	Sat	1.2	A	7.4	B
Phase VI&VII Conditions (Phase V Conditions + Project Phase VI&VII Traffic)[4]	PM	1.6	A	8.1	B
	Sat	1.3	A	8.0	B
Thomas Road/Luchessa Avenue and Church Street					
Background Conditions (Existing Conditions + Approved Projects)	PM	0.8	A	5.8	B
	Sat	0.8	A	4.2	A
Phase II Conditions (Background Conditions + Project Phase II Traffic)[3]	PM	0.9	A	6.6	B
	Sat	0.9	A	4.9	A
Phase III Conditions (Phase II Conditions + Project Phase III Traffic)	PM	1.0	A	7.2	B
	Sat	1.0	A	5.5	B
Phase IV Conditions (Phase III Conditions + Project Phase IV Traffic)	PM	1.2	A	8.5	B
	Sat	1.2	A	6.9	B
Phase V Conditions (Phase IV Conditions + Project Phase V Traffic)	PM	1.4	A	10.2	C
	Sat	1.5	A	8.8	B
Phase VI&VII Conditions (Phase V Conditions + Project Phase VI&VII Traffic)[4]	PM	1.5	A	11.1	C
	Sat	1.6	A	9.8	B

Table 6

Background and Project Intersection Levels of Service

Scenario	Peak Hour	Intersection Average Delay[1]	Intersection LOS[2]	Worst Case Movement[3] Average Total Delay	Worst Case Movement[3] LOS
Monterey Street and Farman Frontage Road					
Background Conditions (Existing Conditions	PM	0.8	A	11.2	C
+ Approved Projects)	Sat	0.5	A	7.5	B
Phase II Conditions (Background Conditions +	PM	1.7	A	14.2	C
Project Phase II Traffic)[3]	Sat	1.4	A	9.8	B
Phase III Conditions (Phase II Conditions +	PM	2.5	A	17.1	C
Project Phase III Traffic)	Sat	2.3	A	12.3	C
Phase IV Conditions (Phase III Conditions +	PM	6.0	B	**32.4**	**E**
Project Phase IV Traffic)	Sat	6.1	B	25.1	D
Phase V Conditions (Phase IV Conditions +	PM	28.4	D	**132.3**	**F**
Project Phase V Traffic)	Sat	**45.6**	**F**	**167.1**	**F**
Phase VI&VII Conditions (Phase V	PM	**60.0**	**F**	**266.3**	**F**
Conditions + Project Phase VI&VII Traffic)[4]	Sat	**117.1**	**F**	**407.9**	**F**

Notes:
[1] Average total intersection delay, expressed in seconds per vehicle.
[2] LOS calculations performed using the CMP level of service analysis program, TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections.
[3] Phase I does not include trip generating uses. Phase I operations would be the same as Background Conditions.
[4] Equal to project buildout conditions. Phase VIII and IX do not generate additional traffic.

seconds per vehicle) during the PM peak hour and LOS D (25.1 seconds of average total delay per vehicle) during the Saturday peak hour with the completion of Phase IV of the project. While the City of Gilroy does not have an LOS standard for individual turning movements at an unsignalized intersection, LOS E operations are generally considered unacceptable.

The project would not have a significant impact on the intersections of Thomas Road/Luchessa Avenue with Princevalle and Church Streets.

Intersection Mitigation Measures

With the final phase of the project, the installation of a traffic signal at the Monterey Street/Farman Frontage Road intersection is proposed. Mitigation for project impacts would be the installation of this traffic signal prior to completion of Phase IV of the project. The Peak Hour Volume Warrant for signal installation in the Caltrans *Traffic Manual* was investigated to

determine when traffic volumes at the intersection would satisfy the warrant requirements. The estimated traffic volumes for Phase III through Buildout (Phase VI +VII) were compared to the requirements for rural areas because travel speeds on Monterey Street at Thomas Road/Luchessa Avenue exceeds 45 mph (the speed limit is 50 mph). Traffic volumes after the completion of Phases IV through buildout satisfy the warrant requirements during both peak hours. Traffic projections for the PM peak hour after completion of Phase III would marginally meet requirements. The signal warrant sheets are included in Appendix D.

The operation of the signalized intersection was evaluated with the level of service methodology approved by the VTA, and adopted by the City of Gilroy. This method evaluates an intersection's operation based on the average stopped vehicular delay calculated using the method described in Chapter 9 of the 1985 *Highway Capacity Manual* (HCM) with adjusted saturation flow rates. The average delay for signalized intersections is calculated using the TRAFFIX analysis software and is correlated to a level of service designation as shown in Table 7. The Level of Service Standard for signalized City of Gilroy intersections is LOS C.

With installation of the traffic signal, the intersection is projected to operate at LOS C during both peak hours with the addition of Phase IV through buildout traffic volumes. The lane configuration was assumed to remain unchanged from Existing Conditions:

Southbound Approach - one left-turn lane, one through lane, one shared through/right-turn lane
Westbound Approach - one shared lane for all movements
Northbound Approach - one left-turn lane, one through lane, one shared through/right-turn lane
Eastbound Approach - one shared lane for all movements

It was assumed that protected left-turn phasing would be provided for the northbound and southbound approach, while a single signal phase would be provided to serve the eastbound and westbound approaches. It is recommended that a separate left-turn lane be added to the eastbound approach to serve the traffic leaving the sports park and to allow for the addition of protected left-turn phasing for this approach in the future. Under buildout conditions, up to 286 vehicles are projected to turn left from eastbound/northbound Farman Frontage Road onto northbound Monterey Street. With the low volumes projected for the hotel driveway that forms the westbound approach of the intersection, a left-turn phase is not warranted. However, in the future, changes to traffic conditions in the area may require the addition of a left-turn phase.

Table 7

Signalized Intersection Level of Service Definitions Using Average Stopped Vehicular Delay

Level of Service	Average Stopped Delay Per Vehicle (Seconds)	Description
A	≤ 5.0	Operations with very low delay occurring with favorable progression and/or short cycle length.
B+ B B-	5.1 to 7.0 7.1 to 13.0 13.1 to 15.0	Operations with low delay occurring with good progression and/or short cycle lengths.
C+ C C-	15.1 to 17.0 17.1 to 23.0 23.1 to 25.0	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.
D+ D D-	25.1 to 28.0 28.1 to 37.0 37.1 to 44.0	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.
E+ E E-	40.1 to 44.0 44.1 to 56.0 56.1 to 60.0	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.
F	> 60.0	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.

Source: VTA's CMP Transportation Impact Analysis Guidelines, May 1998 and *Highway Capacity Manual*, Special Report 209, Transportation Research Board, 1994.

Freeway Segment Level of Service Analysis

According to CMP 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 U.S. 101 were reviewed to determine if a significant amount of project traffic would be added to these freeway segments[4] during the PM peak hour. Capacities of 2,200

[4]The segments of U.S. 101 south of Monterey Street are highway (not freeway) segments. The CMP TIA guidelines do not specify a methodology for the analysis of multi-lane highway segments. Therefore, the freeway segment methodology was used to determine if a significant amount of project traffic is added to these segments.

vehicles per hour per lane (vphpl) for four-lane segments[5] and 2,300 vphpl for freeway segments with six or more lanes were used in the analysis. Table 8 presents the capacities of each segment, the estimated number of trips added to each segment by the proposed development during the PM peak hour, and whether or not the freeway segment must be evaluated in greater detail.

Freeway Segment Impacts

The project is not estimated to add traffic equal to or greater than one percent of the capacity to the four nearby freeway segments. Therefore, additional analysis is not required. The project's impact on the segments of U.S. 101 in the study area is estimated to be insignificant.

Table 8

Project Freeway Segment Analysis (PM Peak Hour)

Segment	Capacity[1]	1% of Capacity	Project Trips	Requires Analysis?
Northbound U.S. 101, Tenth Street to Monterey Street	6,900	69	55	No
Southbound U.S. 101, Tenth Street to Monterey Street	6,900	69	55	No
Northbound U.S. 101, Monterey Street to Castro Valley Road	4,400	44	28	No
Southbound U.S. 101, Monterey Street to Castro Valley Road	4,400	44	28	No

Notes: [1] A capacity of 2,200 vehicles per hour per lane was used for four-lane highway segments, while a capacity of 2,300 vehicles per hour per lane was used for freeway segments with six or more lanes.

Improvements to Other Travel Modes

Pedestrian Access

As part of the project, six-foot wide sidewalks are proposed to be constructed along the west side of Farman Frontage Road between Monterey Street and the park entrance and along the west side of Monterey Street between Thomas Road/Luchessa Avenue and Farman Frontage Road. Crosswalks are proposed across the north leg of the Monterey Street/Farman Frontage Road

[5]The *1994 Highway Capacity Manual* indicates a capacity of 2,200 vphpl for multi-lane highway segments (assuming a design speed 60 miles per hour).

crossing of the Thomas Road/Luchessa Avenue bridge is the recommended pedestrian and bicycle facility.)

Due to travel speeds along Thomas Road/Luchessa Avenue (in excess of 40 mph), crosswalks are not recommended without the protection of traffic signals with pedestrian heads for pedestrian crossing or all-way stop sign control (stop signs on all three intersection approaches). The installation of signals were investigated via Caltrans traffic signal warrants. The vehicular volumes projected after the completion of the sports park do not satisfy the Peak Hour Volume Warrant requirements (see Appendix D). Caltrans' "Warrant 3 - Minimum Pedestrian Volume" for traffic signal installation requires a pedestrian volume crossing the major street of 100 or more for each of any four hours or 190 or more during any one hour during an average day.[6] Data provided in the Santa Clara County Countywide Trails Master Plan (July 1995) indicates that usage of the Uvas Creek Trail (measured at Miller Avenue) was about 260 persons on a Saturday and 150 persons on a Tuesday in May 1994. The most likely users of the trail for park access will be residents living in the neighborhoods immediately north of Thomas Road/Luchessa Avenue. As shown on Figure 6, five percent of the project-generated traffic is estimated to originate or be destined for this area. Assuming a vehicle occupancy of 2.0 person per vehicle, 80 person trips during the Saturday peak hour and 55 person trips during the PM peak hour would be generated by these neighborhoods. This projection does not meet the minimum volume required. Therefore signals are not recommended in the near-term.

It is recommended that this location be monitored for both vehicular and pedestrian/bicycle volumes, and an all-way stop or traffic signals (with pedestrian heads) be installed if warrant requirements are met. As land use developments in the area are builtout, traffic volumes along Thomas Road/Luchessa Avenue will increase. The City monitors traffic volumes at this intersection and staff indicates that this intersection will be signalized in the future when traffic volumes meet the required levels.

Transit Access

The project master plan indicates that the VTA will extend bus service to serve the sports park. City staff has indicated that the VTA will extend service when other development in this area (including hotels and other commercial along Monterey Street) generate sufficient demand for bus service.

The site plan shows a bus stop and turn around area on Farman Frontage Road south of the project entrance. This bus stop and turn around should be designed to VTA standards. Pedestrian

[6]In addition to the minimum pedestrian volume, less than 60 gaps per hour in the traffic stream of adequate length for pedestrians to cross during the same time period must be observed.

access should be provided from the bus stop to the park, including a sidewalk along Farman Frontage Road that connects to the internal pedestrian paths.

Site Access, On-Site Circulation and Parking

Site Access

The Gilroy Sports Park will be served by one driveway on Farman Frontage Road. The intersection of the driveway with Farman Frontage Road will be controlled by a stop sign on the driveway approach. During the worst case peak hour on a Saturday, 400 vehicles are projected to exit the site during one hour. Due to the low volumes along Farman Frontage road (currently 17 vehicles during the Saturday peak hour and 56 vehicles during the PM peak hour), the intersection of the driveway with Farman Frontage Road is projected to operate at acceptable levels—overall LOS A operations with LOS B operations for the park driveway approach (see Appendix E).

Entry to the park will be controlled by a cashier at the entry building located approximately 500 feet from intersection of the park entry road with Farman Frontage Road. A flat parking fee would be charged to vehicles entering the park with some park users (such as tournament players and members of league teams) using passes provided in advance. The hourly design capacity for a parking entrance with a cashier and a flat fee is approximately 300 vehicles per hour per entry lane (vphpl). The project proposes to have at least two entry lanes. The highest inbound volume to the park is expected to occur during the Saturday peak hour. The estimated hourly peak volume is 400 vehicles. The 95th percentile queue was calculated using a Poisson distribution, a capacity of 300 vphpl, two entry lanes, and a peak volume of 400 vph (see Appendix E). The results indicate that the maximum queue would be approximately 175 feet in each of two lanes. The 500-foot storage length would be sufficient to serve this queue.

Two turn around areas are provided along the entry road: one between the park gates and Farman Frontage Road and a second west of the entry building. These locations will allow vehicles arriving after the park has closed (or drivers wishing to exit for other reasons) to make U-turns and exit the park.

On-Site Circulation

On-site circulation was reviewed and generally found to be adequate. Pedestrian paths and sidewalks are located throughout the park and provide adequate internal pedestrian circulation and connections to the Uvas Creek Trail and Farman Frontage Road. Pedestrians paths along the perimeter of the park are 12 feet wide and double as emergency access roadways.

Some recommended improvements for vehicular circulation are listed below. Sketches illustrating the changes are included in Appendix F.

- The outbound lanes of the entry road near Farman Frontage Road should be narrowed to one lane with paint to allow two outbound lanes (with park personnel directing traffic), if needed.

- All-way stop sign control is recommended at the intersection of the entry road and the main north-south road. All-way stop sign control will provide safer conditions for pedestrians crossing this intersection.

- It is recommended that the first driveway on the entrance road (closest to Farman Frontage Road) be widened to allow both inbound and outbound traffic and the landscape median along the entry road be cut back to allow left turns from this parking area onto the entry road. Currently, the on-site traffic is concentrated at the intersection of the entry road and the main north-south circulation road. Allowing left turns out of the eastern most driveway will diffuse some of this traffic. Landscaping in the median should be low (two to 2.5 feet in height) or taller trees with thin trunks, which should be pruned to maintain adequate sight distance.

- The provision of an additional north-south circulation aisle in the western-most parking area to break-up the long rows of parking spaces is recommended. In addition, the parking bays and circulation aisles should be extended eastward, eliminating the isolated landscaped barrier at the east end of the parking area.

Parking

The parking demand was estimated in a manner similar to trip generation, based on the planned operation of the sports park and assumptions regarding numbers of persons per vehicle for the different uses within the park. The parking demand estimates by phase are presented in Table 9. Details of the parking estimate calculations are contained in Appendix G. The parking demand after buildout of the park is estimated be 996 parked vehicles.

The recommended parking supply is the parking demand plus five percent to account for circulating vehicles. Therefore, the recommended parking supply for the Gilroy Sports Park is 1,047 parking spaces. The recommended parking supply by phase is presented in Table 8.

The site plan (date June 16, 1998) includes 1,049 parking spaces, which will adequately serve the projected demand. Table 9 presents a comparison of the recommended parking supply by phase to the proposed parking supply by phase. A shortfall is projected to occur after the

completion of Phase V. It is recommended that 180 of the 298 parking spaces that will be constructed with Phase VI be constructed instead with Phase V to offset the projected shortfall.

The City of Gilroy Zoning Ordinance does not include an off-street parking requirement for ball parks. The most similar land use included in the ordinance is a theater or auditorium with fixed seats. The parking requirement for this land use is one parking space per four seats or seven feet of bench space. The proposed sports park will have approximately 300 feet of bench space for each of the 13 ballfields, for a total of 3,900 feet of bench. The required off-street parking supply would be 558 spaces. The proposed 1,049 parking spaces would be sufficient to meet this requirement.

Table 9

Parking Demand and Supply Summary

Phase	Cumulative Estimated Demand	Cumulative Supply		
		Recommended	Provided	Difference
I	0	0	117	+117
II	196	206	278	+72
III	326	343	439	+96
IV	606	637	751	+114
V	886	931	751	-180
VI & VII	996	1047	1049	+2
VII & IX	996	1047	1049	+2

CHAPTER 5 - CUMULATIVE CONDITIONS

This chapter presents the results of the level of service calculations under Cumulative Conditions. Cumulative Conditions are defined as existing volumes plus traffic generated by approved but not yet constructed developments in the project study area, plus traffic generated by the proposed project, plus traffic associated with proposed but not approved developments in the study area.

Cumulative Traffic Estimates

Traffic volumes for Cumulative Conditions were estimated by adding traffic associated with pending developments to traffic volumes estimated for Project Conditions. There are two pending developments in the study area: a 113-room Hilton at Monterey Street and U.S. 101 and the Gilroy Cinemas (an 8-screen, 1,100-seat movie theater) located on the west side of Monterey Street, south of Tenth Street. PM peak-hour traffic volumes for these developments were estimated based on traffic reports prepared for the developments and provided by City staff. Saturday peak-hour volumes were estimated using trip generation rates from *ITE Trip Generation.*[7]

Cumulative Intersection Levels of Service

The operation of the key intersections were evaluated with a level of service calculation. The results are presented in Table 10.

Under Cumulative Conditions, the intersection of Princevalle Street and Thomas Road/Luchessa Avenue is projected to continue to operate at acceptable levels. The overall intersection operations are projected to be LOS A during both the PM and Saturday peak hours, while the worst case approach is projected to operate at LOS B during both peak hours. The intersection of Thomas Road/Luchessa Avenue and Church Street is projected to operate at an overall LOS A during the PM and Saturday peak hours. The worst case movement is projected to operate at LOS C during both peak hours. The intersection of Monterey Street and Farman Frontage Road, with two-way stop-sign control, is projected to operate at LOS F (both overall intersection operations and the worst case approach) during both peak hours. With the installation of a traffic signal, the intersection is projected to operate at LOS C during both PM and the Saturday peak hours.

[7]It should be noted that the Saturday peak hour traffic estimates assume that all the uses included in the approved and cumulative developments, as well as the proposed project, peak at the same time, resulting a conservatively high estimate of Saturday peak-hour volumes.

Table 10

Cumulative Intersection Levels of Service

Intersection	Peak Hour	Intersection Average Delay[1]	Intersection LOS [2]	Worst Case Movement [3] Average Total Delay	Worst Case Movement [3] LOS
Thomas Road/Luchessa Avenue and Princevalle Street (Two-Way Stop Controlled)	PM	1.7	A	8.3	B
	Sat	1.3	A	8.2	B
Thomas Road/Luchessa Avenue and Church Street (Two-Way Stop Controlled)	PM	1.7	A	12.1	C
	Sat	2.1	A	11.5	C
Monterey Street and Farman Frontage Road (Two-Way Stop Controlled)	PM	116.9	F	560.6	F
	Sat	241.4	F	934.1	F
Monterey Street and Farman Frontage Road (Signalized)	PM	16.7	C	n/a	
	Sat	18.8	C	n/a	

Notes:
[1] Average total intersection delay for unsignalized intersection and whole intersection weighted average stopped delay for signalized intersections, expressed in seconds per vehicle.
[2] LOS calculations performed using the CMP level of service analysis program, TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections and the *1985 Highway Capacity Manual* delay methodology for signalized intersections.
[3] For unsignalized intersections only.

CHAPTER 6 - CONCLUSIONS

The proposed development of the Gilroy Sports Park is estimated to generate 550 PM peak-hour trips (275 inbound/275 outbound) and 800 Saturday peak-hour trips (400 inbound/400 outbound). The impacts of the proposed development on the surrounding roadway system were evaluated following guidelines of the City of Gilroy and the Santa Clara Valley Transportation Authority (VTA).

The results indicate that the project will have a significant adverse impact on the intersection on Monterey Street and Farman Frontage Road. The installation of the proposed traffic signal at this intersection would mitigate project impacts and provide LOS C operations during both the PM and Saturday peak hours. Installation of the traffic signal will be needed prior to the completion of Phase IV of the proposed sports park. Caltrans' Peak Hour Volume Warrant for signal installation will be satisfied with the addition of traffic volumes estimated for the development of Phases I through IV of the proposed park. It is recommended that a separate eastbound left-turn lane be provided to serve the traffic added to the eastbound to northbound left-turn movement by the project. The project is estimated to have an insignificant impact on the operations of the intersections of Princevalle Street and Thomas Road/Luchessa Avenue and Church Street and Thomas Road/Luchessa Avenue, as well as segments of U.S. 101 north of and south of Monterey Street.

Recommendations were made in regard to other improvements proposed by the project, including:

- It is recommended that the crosswalk across Monterey Street at Farman Frontage Road not be provided until the traffic signal is installed at this intersection. The high travel speeds on Monterey Street (in excess of 50 mph) and the width of the street (120 feet) make it hazardous for pedestrians to cross without the protection of a traffic signal.

- The proposed Farman Frontage Road bus stop should be designed to VTA standards. Pedestrian access should be provided from the bus stop to along Farman Frontage Road that connects to the internal pedestrian paths.

- The proposed sidewalk along the west side of Monterey Street should connected to and coordinated with the City's improvement plans for the intersection of Thomas Road/Luchessa Avenue and Monterey Street (which include traffic signal installation and pedestrian signals). It is recommended that the sidewalks along Monterey Street be installed when the other improvements (i.e., the installation of the traffic signal) occur at the Monterey Street/Farman Road intersection prior to Phase IV.

- Due to travel speeds along Thomas Road/Luchessa Avenue (in excess of 40 mph), a crosswalk is not recommended without the protection of a traffic signal with pedestrian heads for pedestrian crossing or all-way stop sign control (stop signs on all three intersection approaches). The recommended pedestrian and bicycle facility is the connection of the existing trail north of Thomas Road/Luchessa Avenue with the proposed trail to the south via the future under-crossing of the Thomas Road/Luchessa Avenue bridge. It is recommended that this location be monitored for both vehicular and pedestrian/bicycle volumes, and an all-way stop or traffic signals (with pedestrian heads) be installed if warrant requirements are met.

Site access, on-site circulation and parking were assessed. The proposed parking supply of 1,049 was found to be adequate to serve the estimated demand. However, a shortfall is projected to occur after the completion of Phase V. It is recommended that 180 of the 298 parking spaces that will be constructed with Phase VI be constructed instead with Phase V to offset the projected shortfall.

Site access was found to be adequate, with sufficient storage provided for queued vehicles between Farman Frontage Road and the main entry building, where a parking fee will be collected.

On-site circulation was reviewed and generally found to be adequate. The following recommendation were made:

- The outbound lanes of the entry road near Farman Frontage Road should be narrowed to one lane with paint to allow two outbound lanes (with park personnel directing traffic), if needed.

- All-way stop sign control is recommended at the intersection of the entry road and the main north-south road. All-way stop sign control will provide safer conditions for pedestrians crossing this intersection.

- It is recommended that the first driveway on the entrance road (closest to Farman Frontage Road) be widened to allow both inbound and outbound traffic and the landscape median along the entry road be cut back to allow left turns from this parking area onto the entry road. Currently, the on-site traffic is concentrated at the intersection of the entry road and the main north-south circulation road. Allowing left turns out of the eastern most driveway will diffuse some of this traffic. Landscaping in the median should be low (two to 2.5 feet in height) or taller trees with thin trunks, which should be pruned to maintain adequate sight distance.

- The provision of an additional north-south circulation aisle in the western-most parking area to break-up the long rows of parking spaces is recommended. In addition, the parking bays and circulation aisles should be extended eastward, eliminating the isolated landscaped barrier at the east end of the parking area.

APPENDICES

APPENDIX A

TRAFFIC COUNTS

MARKS TRAFFIC DATA SERVICE

ITY OF GILROY

Site Code : 00000000
Start Date: 10/24/98
File I.D. : FRONTA-S
Page : 1

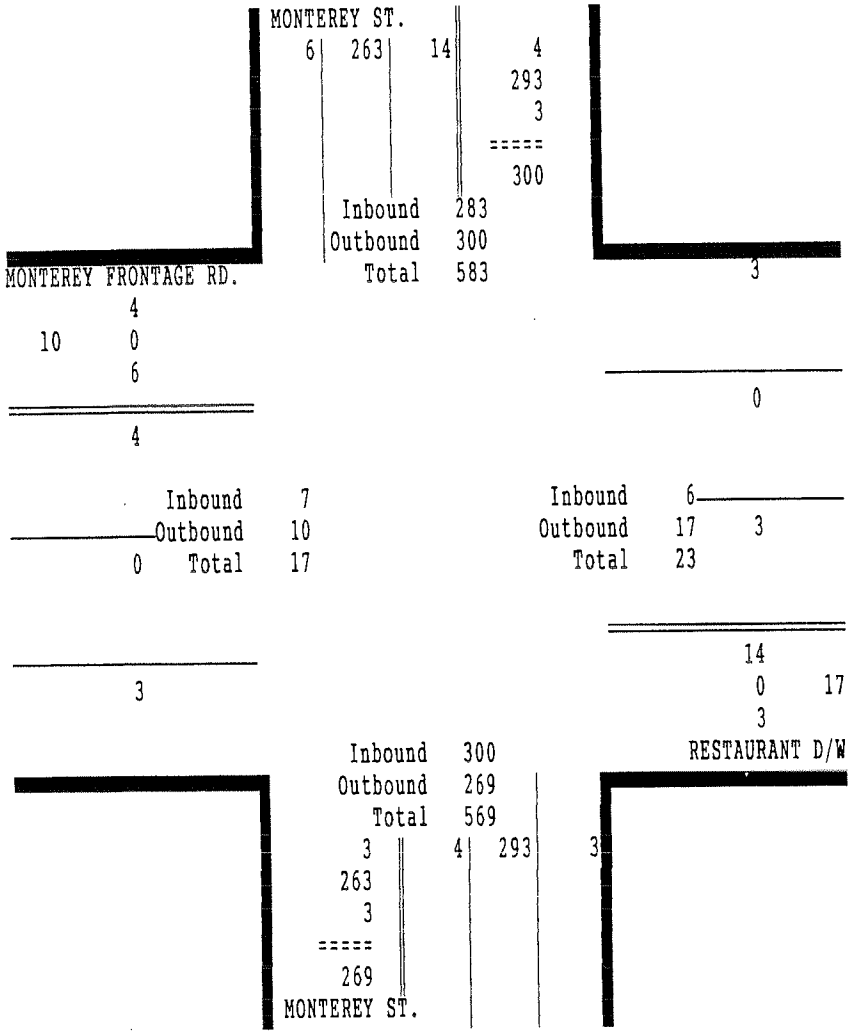
Start Time	MONTEREY ST. Southbound				RESTAURANT D/W Westbound				MONTEREY ST. Northbound				MONTEREY FRONTAGE RD. Eastbound				
	Rght	Thru	Left	Totl	Rght	Thru	Left	Totl	Rght	Thru	Left	Totl	Rght	Thru	Left	Totl	Total
12:00pm	1	48	2	51	1	0	1	2	2	58	0	60	1	0	1	2	115
12:15	2	50	1	53	1	0	2	3	1	55	0	56	2	3	0	5	117
12:30	0	55	6	61	1	0	1	2	2	63	1	66	0	0	1	1	130
12:45	0	75	3	78	1	0	1	2	0	79	0	79	1	0	1	2	161
Hour Total	3	228	12	243	4	0	5	9	5	255	1	261	4	3	3	10	523
01:00pm	3	70	3	76	0	0	1	1	1	74	2	77	0	0	1	1	155
01:15	3	63	2	68	1	0	0	1	0	77	1	78	2	0	1	3	150
01:30	1	61	1	63	1	0	1	2	1	58	1	60	1	0	1	2	127
01:45	1	58	3	62	1	0	0	1	2	82	4	88	2	0	2	4	155
Hour Total	8	252	9	269	3	0	2	5	4	291	8	303	5	0	5	10	587
Grand	11	480	21	512	7	0	7	14	9	546	9	564	9	3	8	20	1110
% of Total	1.0%	43.2%	1.9%		.6%	0.0%	.6%		.8%	49.2%	.8%		.8%	.3%	.7%		
Apprch %				46.1%				1.3%				50.8%				1.8%	
% of Apprch	2.1%	93.8%	4.1%		50.0%	0.0%	50.0%		1.6%	96.8%	1.6%		45.0%	15.0%	40.0%		

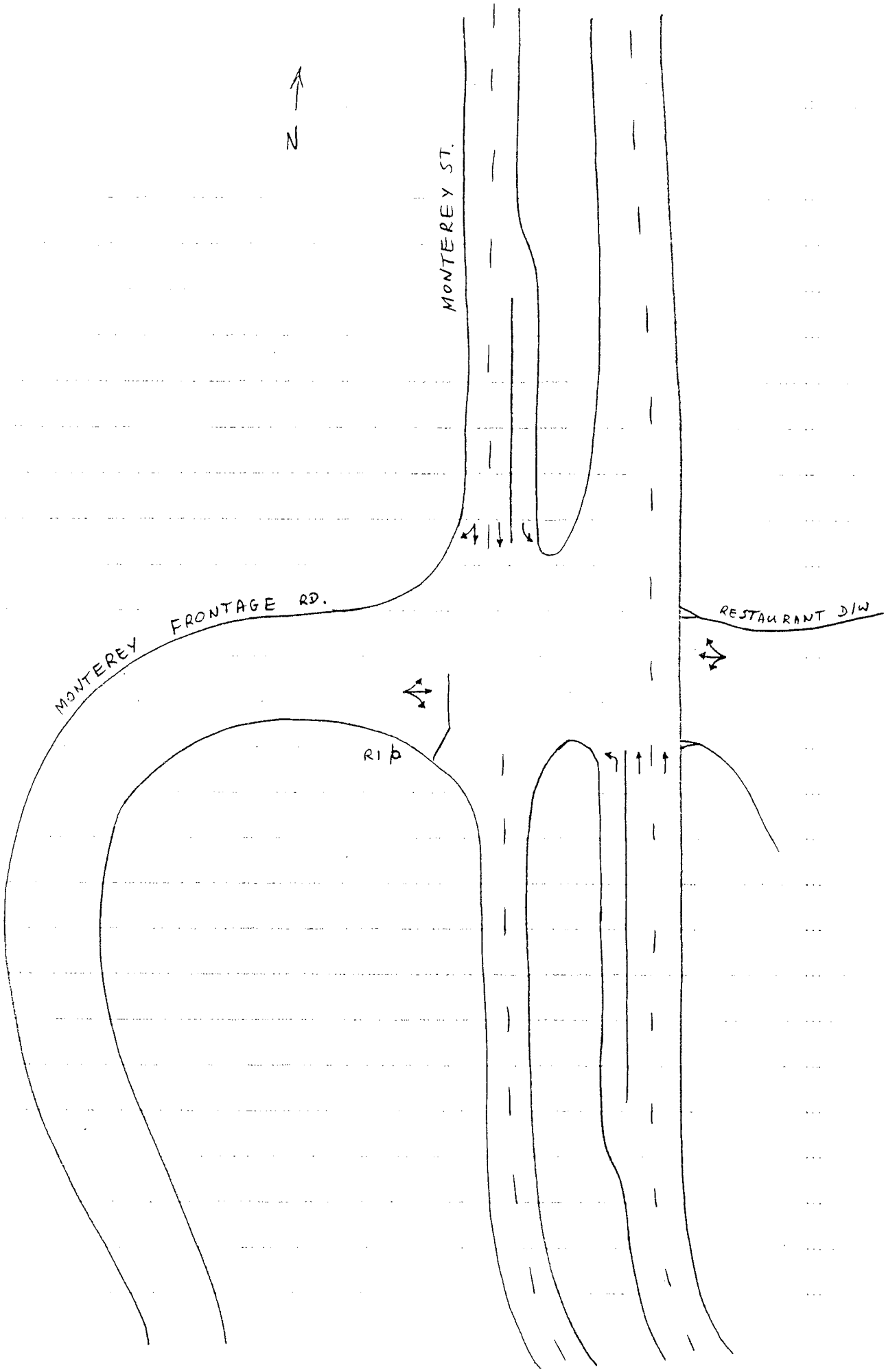
Peak Hour Analysis By Entire Intersection for the Period: 12:00pm to 01:45pm on 10/24/98

Direction	Street Name	Start Peak Hour	Peak Hr Factor	..... Volumes ..... Rght	Thru	Left	Total	..... Percentages ..... Rght	Thru	Left
Southbound	MONTEREY ST.	12:30pm	.907	6	263	14	283	2.1	92.9	4.9
Westbound	RESTAURANT D/W		.750	3	0	3	6	50.0	.0	50.0
Northbound	MONTEREY ST.		.949	3	293	4	300	1.0	97.6	1.3
Eastbound	MONTEREY FRONTAGE RD.		.583	3	0	4	7	42.8	.0	57.1

CITY OF GILROY

Site Code : 00000000
Start Date: 10/24/98
File I.D. : FRONTA-S
Page : 2




N
MONTEREY ST.
MONTEREY FRONTAGE RD.
RESTAURANT D/W
RIP

MARKS TRAFFIC DATA SERVICE

CITY OF GILROY

Site Code : 00000000

Start Date: 10/24/98
File I.D. : PRINCE-S
Page : 1

Start Time	PRINCEVALE ST. Southbound				THOMAS RD. Westbound				Northbound				THOMAS RD. Eastbound				
	Rght	Thru	Left	Totl	Rght	Thru	Left	Totl	Rght	Thru	Left	Totl	Rght	Thru	Left	Totl	Total
12:00pm	4	0	8	12	6	16	0	22	0	0	0	0	0	25	3	28	62
12:15	3	0	10	13	5	14	0	19	0	0	0	0	0	21	4	25	57
12:30	5	0	5	10	5	18	0	23	0	0	0	0	0	27	6	33	66
12:45	5	0	10	15	11	17	0	28	0	0	0	0	0	21	2	23	66
Hour Total	17	0	33	50	27	65	0	92	0	0	0	0	0	94	15	109	251
1:00pm	1	0	10	11	9	30	0	39	0	0	0	0	0	19	4	23	73
1:15	6	0	5	11	5	24	0	29	0	0	0	0	0	21	2	23	63
1:30	4	0	7	11	8	14	0	22	0	0	0	0	0	13	3	16	49
1:45	4	0	5	9	9	15	0	24	0	0	0	0	0	15	3	18	51
Hour Total	15	0	27	42	31	83	0	114	0	0	0	0	0	68	12	80	236
Grand	32	0	60	92	58	148	0	206	0	0	0	0	0	162	27	189	487
% of Total	6.6%	0.0%	12.3%		11.9%	30.4%	0.0%		0.0%	0.0%	0.0%		0.0%	33.3%	5.5%		
Apprch %				18.9%				42.3%								38.8%	
% of Apprch	34.8%	0.0%	65.2%		28.2%	71.8%	0.0%		0.0%	0.0%	0.0%		0.0%	85.7%	14.3%		

Peak Hour Analysis By Entire Intersection for the Period: 12:00pm to 01:45pm on 10/24/98

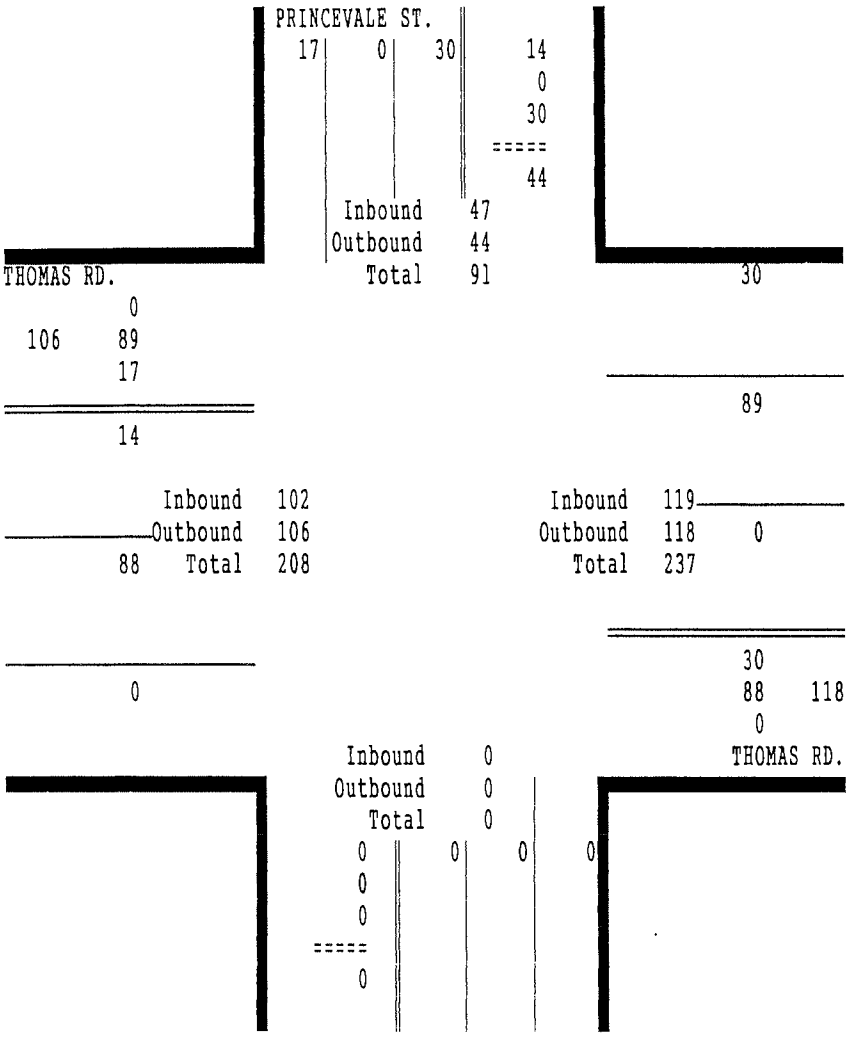
Direction	Street Name	Start Peak Hour	Peak Hr Factor	..... Volumes ..... Rght	Thru	Left	Total	..... Percentages ..... Rght	Thru	Left
Southbound	PRINCEVALE ST.	12:30pm	.783	17	0	30	47	36.1	.0	63.8
Westbound	THOMAS RD.		.763	30	89	0	119	25.2	74.7	.0
Northbound			.0	0	0	0	0	0.0	0.0	0.0
Eastbound	THOMAS RD.		.773	0	88	14	102	.0	86.2	13.7

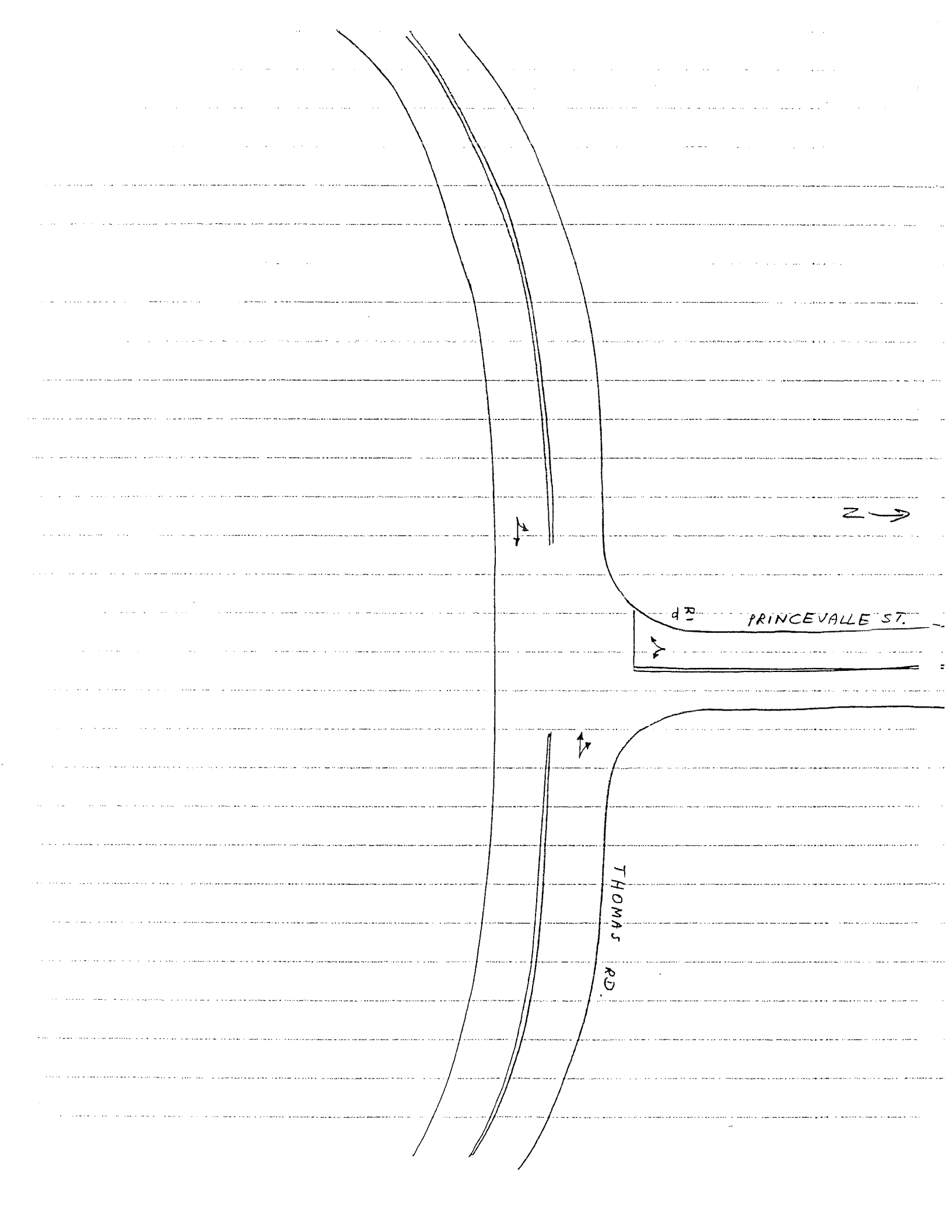
MARKS TRAFFIC DATA SERVICE

CITY OF GILROY

Site Code : 00000000

Start Date: 10/24/98
File I.D. : PRINCE-S
Page : 2




N
PRINCEVALLE ST.
THOMAS RD.

MARKS TRAFFIC DATA SERVICE

TY OF GILROY

Site Code : 00000000

Start Date: 12/16/98
File I.D. : CHURCH-P
Page : 1

art	CHURCH ST. Southbound				THOMAS RD. Westbound				Northbound				THOMAS RD. Eastbound				
me	Rght	Thru	Left	Totl	Rght	Thru	Left	Totl	Rght	Thru	Left	Totl	Rght	Thru	Left	Totl	Total
4:00pm	5	0	7	12	14	27	0	41	0	0	0	0	0	35	10	45	98
4:15	6	0	5	11	14	38	0	52	0	0	0	0	0	33	4	37	100
:30	5	0	5	10	13	39	0	52	0	0	0	0	0	34	6	40	102
:45	5	0	6	11	17	44	0	61	0	0	0	0	0	31	7	38	110
Hour Total	21	0	23	44	58	148	0	206	0	0	0	0	0	133	27	160	410
:00pm	6	0	4	10	18	57	0	75	0	0	0	0	0	36	16	52	137
5:15	6	0	5	11	18	48	0	66	0	0	0	0	0	25	6	31	108
5:30	11	0	13	24	11	61	0	72	0	0	0	0	0	33	10	43	139
5:45	3	0	4	7	13	65	0	78	0	0	0	0	0	32	5	37	122
our Total	26	0	26	52	60	231	0	291	0	0	0	0	0	126	37	163	506
rand	47	0	49	96	118	379	0	497	0	0	0	0	0	259	64	323	916
of Total	5.1%	0.0%	5.3%		12.9%	41.4%	0.0%		0.0%	0.0%	0.0%		0.0%	28.3%	7.0%		
pprch %				10.5%				54.3%								35.3%	
% of Apprch	49.0%	0.0%	51.0%		23.7%	76.3%	0.0%		0.0%	0.0%	0.0%		0.0%	80.2%	19.8%		

Peak Hour Analysis By Entire Intersection for the Period: 04:00pm to 05:45pm on 12/16/98

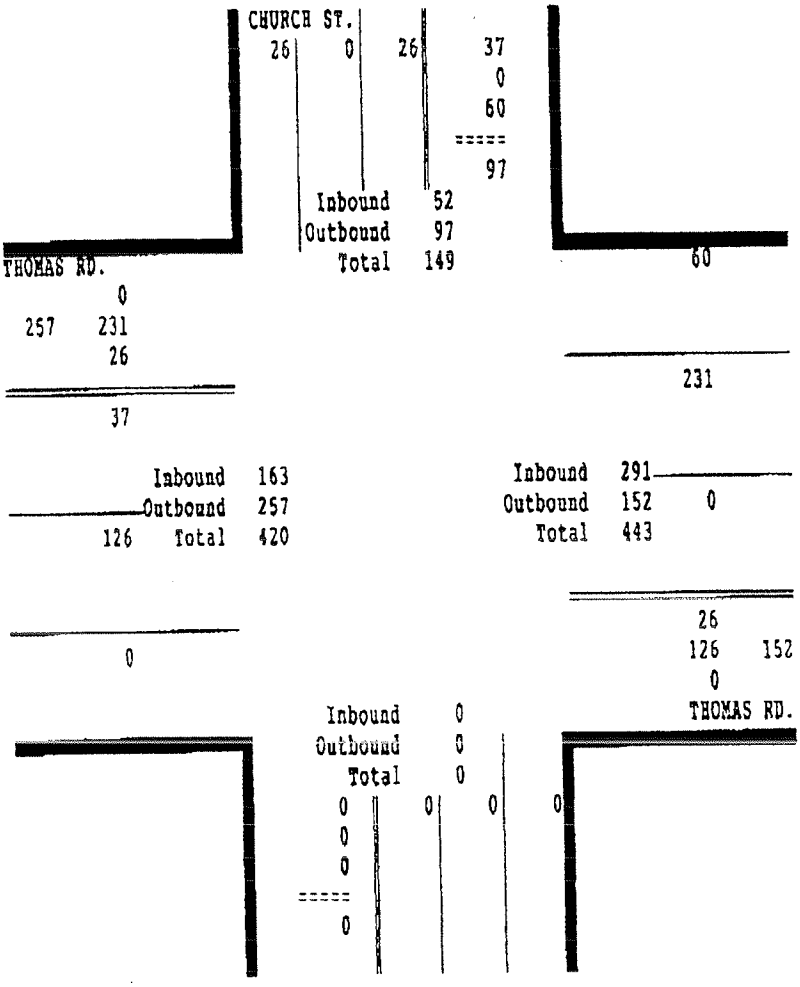
Direction	Street Name	Start Peak Hour	Peak Hr Factor	..... Volumes ..... Rght	Thru	Left	Total	..... Percentages ..... Rght	Thru	Left
Southbound	CHURCH ST.	05:00pm	.542	26	0	26	52	50.0	.0	50.0
Westbound	THOMAS RD.		.933	60	231	0	291	20.6	79.3	.0
Northbound			.0	0	0	0	0	0.0	0.0	0.0
Eastbound	THOMAS RD.		.784	0	126	37	163	.0	77.3	22.6

MARKS TRAFFIC DATA SERVICE

:ITY OF GILROY

Site Code : 00000000

Start Date: 12/16/98
File I.D. : CHURCH-P
Page : 2



MARKS TRAFFIC DATA SERVICE

ITY OF GILROY

Site Code : 00000000
Start Date: 12/19/98
File I.D. : CHURCH_M
Page : 1

	CHURCH ST. Southbound				THOMAS RD. Westbound				Northbound				THOMAS RD. Eastbound				
Start Time	Rght	Thru	Left	Totl	Rght	Thru	Left	Totl	Rght	Thru	Left	Totl	Rght	Thru	Left	Totl	Total
2:00pm	3	0	8	11	10	28	0	38	0	0	0	0	0	22	5	27	76
12:15	1	0	9	10	6	17	0	23	0	0	0	0	0	34	4	38	71
12:30	3	0	3	6	9	19	0	28	0	0	0	0	0	31	7	38	72
12:45	11	0	7	18	6	18	0	24	0	0	0	0	0	28	4	32	74
Hour Total	18	0	27	45	31	82	0	113	0	0	0	0	0	115	20	135	293
1:00pm	13	0	2	15	8	25	0	33	0	0	0	0	0	23	9	32	80
1:15	5	0	4	9	5	19	0	24	0	0	0	0	0	25	5	30	63
1:30	5	0	4	9	4	32	0	36	0	0	0	0	0	27	5	32	77
1:45	1	0	4	5	8	15	0	23	0	0	0	0	0	21	3	24	52
Hour Total	24	0	14	38	25	91	0	116	0	0	0	0	0	96	22	118	272
Grand	42	0	41	83	56	173	0	229	0	0	0	0	0	211	42	253	565
% of Total	7.4%	0.0%	7.3%		9.9%	30.6%	0.0%		0.0%	0.0%	0.0%		0.0%	37.3%	7.4%		
Apprch %				14.7%				40.5%								44.8%	
% of Apprch	50.6%	0.0%	49.4%		24.5%	75.5%	0.0%		0.0%	0.0%	0.0%		0.0%	83.4%	16.6%		

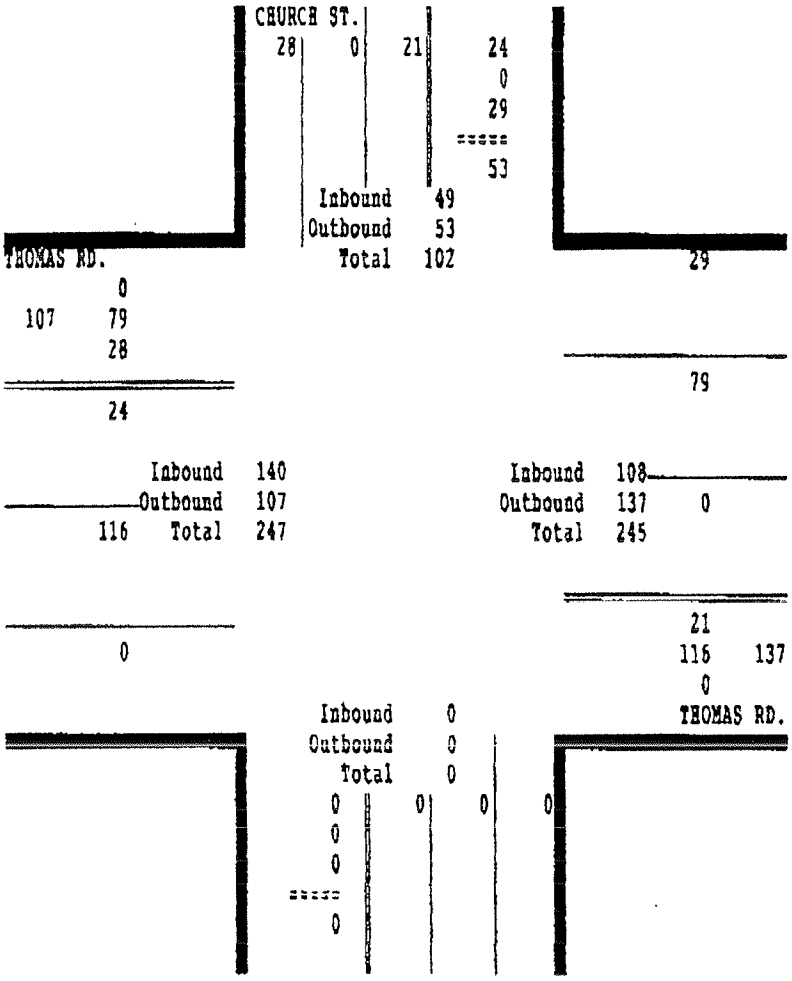
Peak Hour Analysis By Entire Intersection for the Period: 12:00pm to 01:45pm on 12/19/98

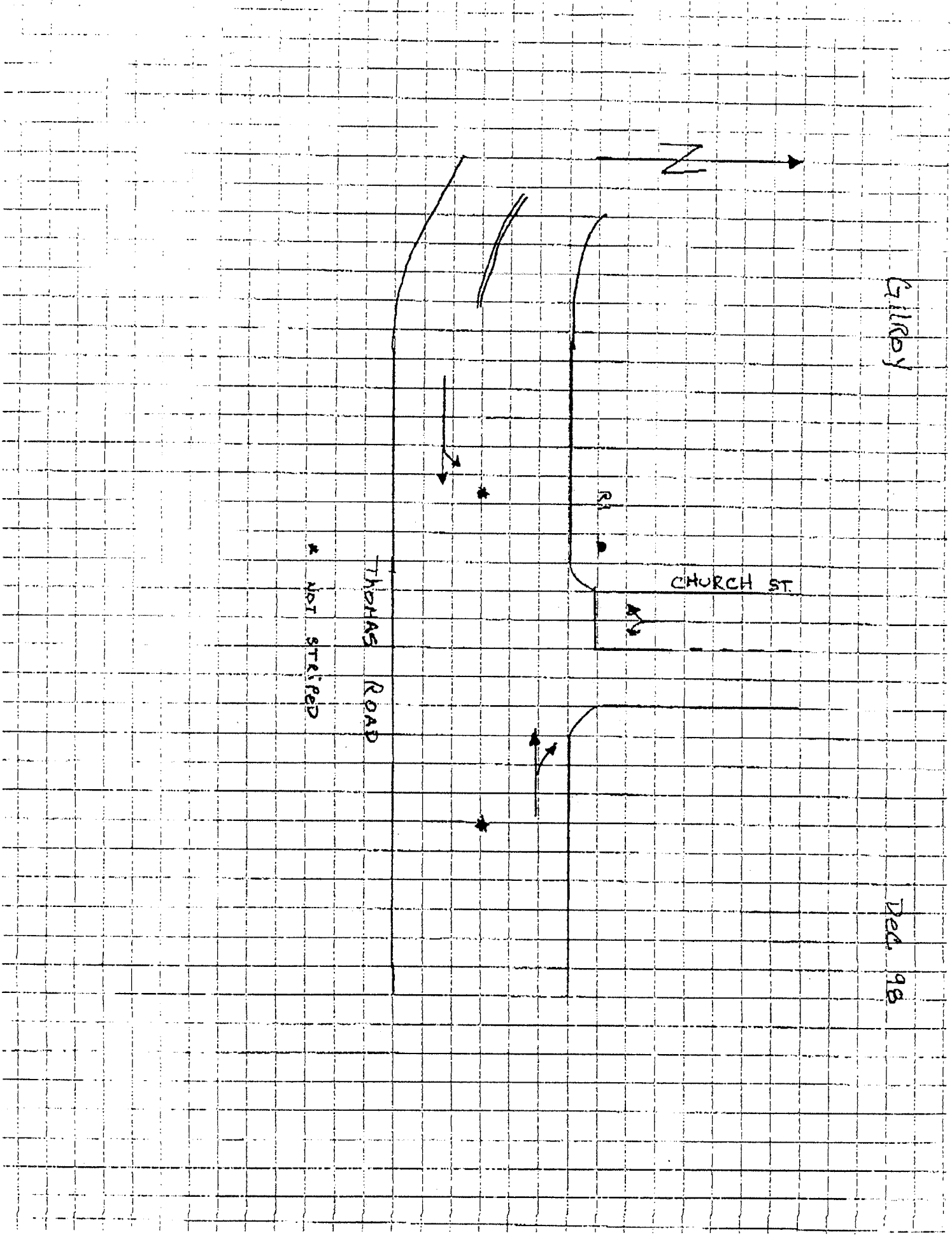
Direction	Street Name	Start Peak Hour	Peak Hr Factor	..... Volumes ..... Rght	Thru	Left	Total	..... Percentages ..... Rght	Thru	Left
Southbound	CHURCH ST.	12:15pm	.681	28	0	21	49	57.1	.0	42.8
Westbound	THOMAS RD.		.818	29	79	0	108	26.8	73.1	.0
Northbound			.0	0	0	0	0	0.0	0.0	0.0
Eastbound	THOMAS RD.		.921	0	116	24	140	.0	82.8	17.1

MARKS TRAFFIC DATA SERVICE

CITY OF GILROY

Site Code : 00000000
Start Date: 12/19/98
File I.D. : CHURCH_M
Page : 2



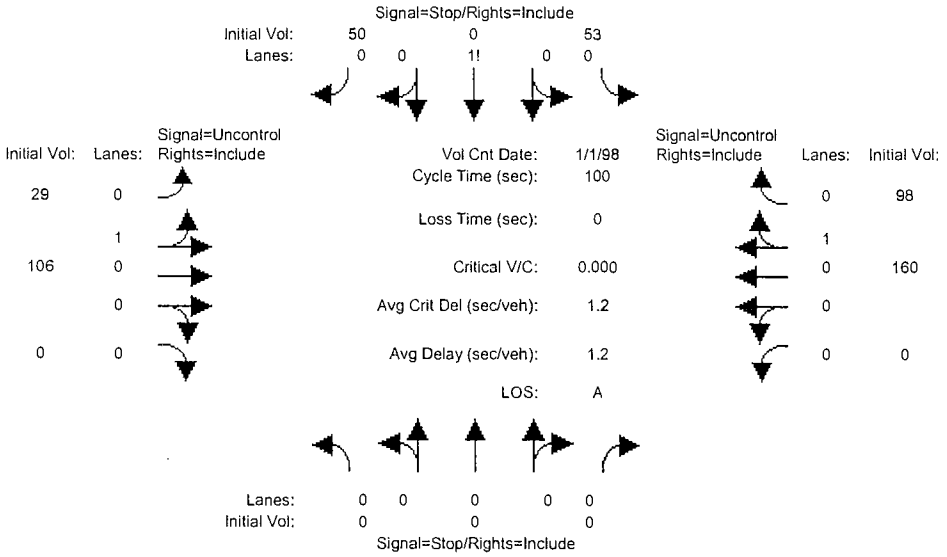

Gilroy
CHURCH ST.
THOMAS ROAD
* NOT STRIPED
Dec. 98

APPENDIX B

LEVEL OF SERVICE CALCULATION SHEETS

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
ExistPM

Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 1 Jan 1998 << PM Peak												
Base Vol:	0	0	0	53	0	50	29	106	0	0	160	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	53	0	50	29	106	0	0	160	98
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	53	0	50	29	106	0	0	160	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	53	0	50	29	106	0	0	160	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	53	0	50	29	106	0	0	160	98
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	58	0	55	32	106	0	0	160	98
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	344	xxxx	209	258	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	669	xxxx	1085	1292	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.97	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	652	xxxx	1085	1292	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	6.0	xxxx	3.5	2.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	808	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	4.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	*	*	*	*	*	*
ApproachDel:	0.0			4.8			0.7			0.0		

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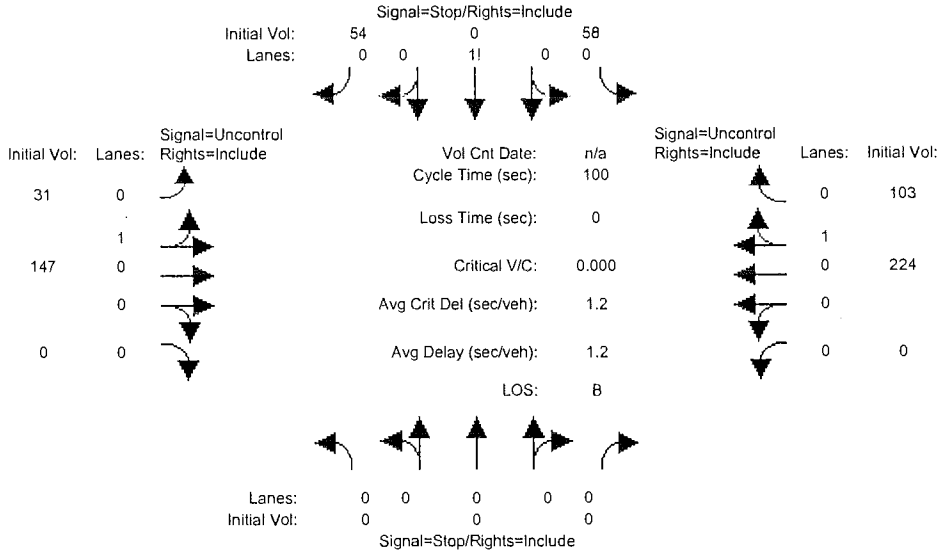
Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
BackPM

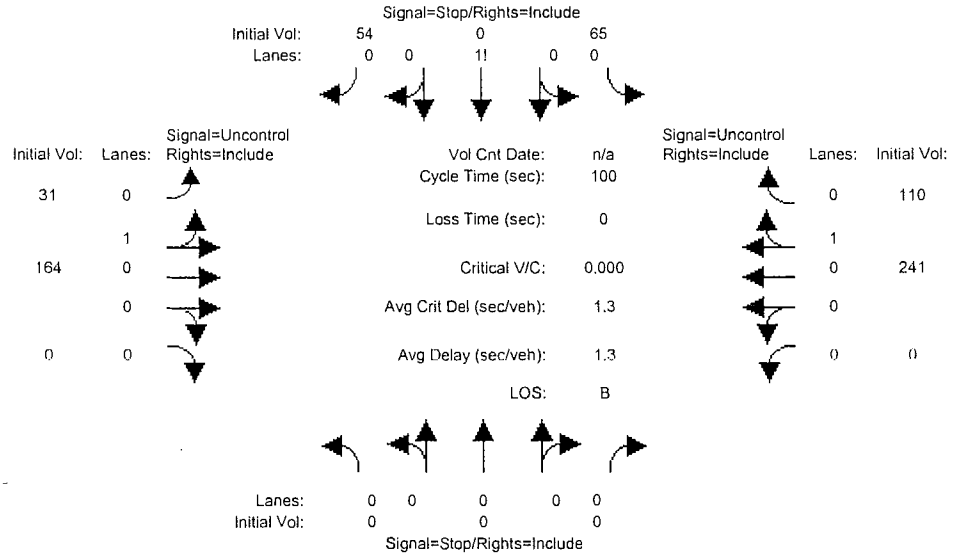
Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	53	0	50	29	109	0	0	160	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	53	0	50	29	109	0	0	160	98
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ApprovedDev:	0	0	0	5	0	4	2	38	0	0	64	5
Initial Fut:	0	0	0	58	0	54	31	147	0	0	224	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	58	0	54	31	147	0	0	224	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	58	0	54	31	147	0	0	224	103
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	64	0	59	34	147	0	0	224	103
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	454	xxxx	276	327	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	578	xxxx	1004	1197	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.97	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	560	xxxx	1004	1197	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	7.2	xxxx	3.8	3.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	712	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	5.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			5.5			0.6			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph2PM

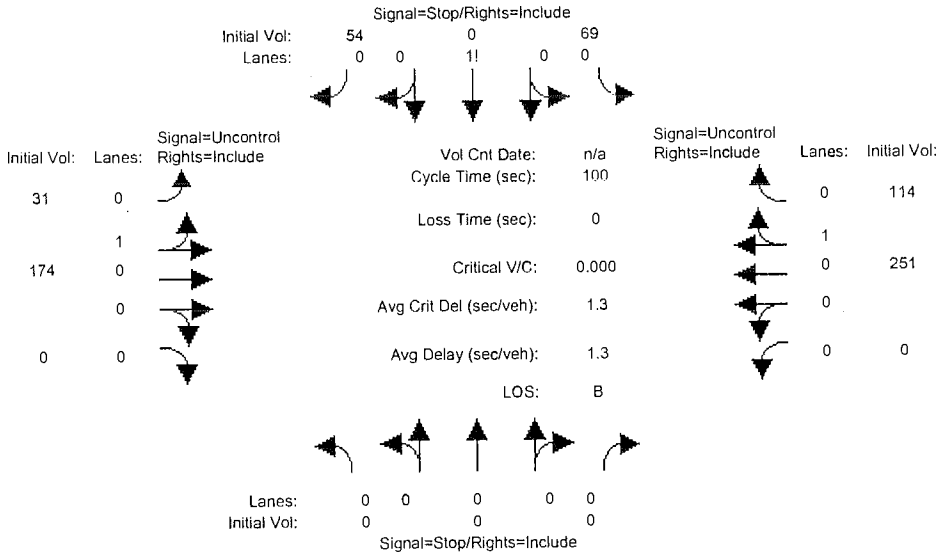
Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	53	0	50	29	109	0	0	160	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	53	0	50	29	109	0	0	160	98
Added Vol:	0	0	0	7	0	0	0	17	0	0	17	7
ApprovedDev:	0	0	0	5	0	4	2	38	0	0	64	5
Initial Fut:	0	0	0	65	0	54	31	164	0	0	241	110
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	65	0	54	31	164	0	0	241	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	65	0	54	31	164	0	0	241	110
Adjusted Volume Module:												
Grade:		0%			0%			0%			0%	
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	72	0	59	34	164	0	0	241	110
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	491	xxxx	296	351	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	550	xxxx	980	1166	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.97	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	532	xxxx	980	1166	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	7.7	xxxx	3.9	3.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	672	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	6.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:		0.0			6.0			0.5			0.0	

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph3PM

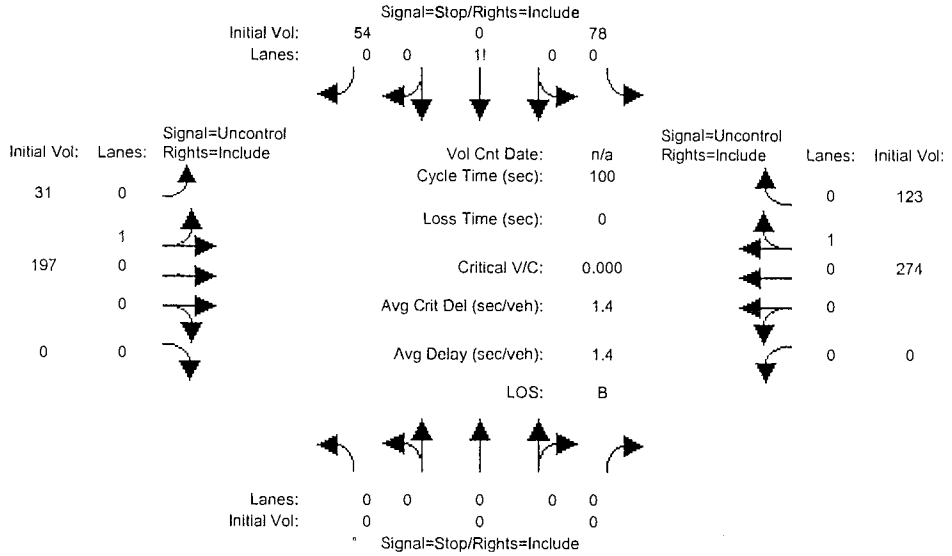
Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	53	0	50	29	109	0	0	160	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	53	0	50	29	109	0	0	160	98
Added Vol:	0	0	0	11	0	0	0	27	0	0	27	11
ApprovedDev:	0	0	0	5	0	4	2	38	0	0	64	5
Initial Fut:	0	0	0	69	0	54	31	174	0	0	251	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	69	0	54	31	174	0	0	251	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	69	0	54	31	174	0	0	251	114
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	76	0	59	34	174	0	0	251	114
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	513	xxxx	308	365	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	534	xxxx	967	1149	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.97	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	517	xxxx	967	1149	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	8.0	xxxx	3.9	3.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	649	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	6.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			6.2			0.5			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph4PM

Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	53	0	50	29	109	0	0	160	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	53	0	50	29	109	0	0	160	98
Added Vol:	0	0	0	20	0	0	0	50	0	0	50	20
ApprovedDev:	0	0	0	5	0	4	2	38	0	0	64	5
Initial Fut:	0	0	0	78	0	54	31	197	0	0	274	123
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	78	0	54	31	197	0	0	274	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	78	0	54	31	197	0	0	274	123
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	86	0	59	34	197	0	0	274	123
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	564	xxxx	336	397	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	499	xxxx	936	1109	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.97	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	482	xxxx	936	1109	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	8.9	xxxx	4.1	3.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	601	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	6.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			6.9			0.5			0.0		

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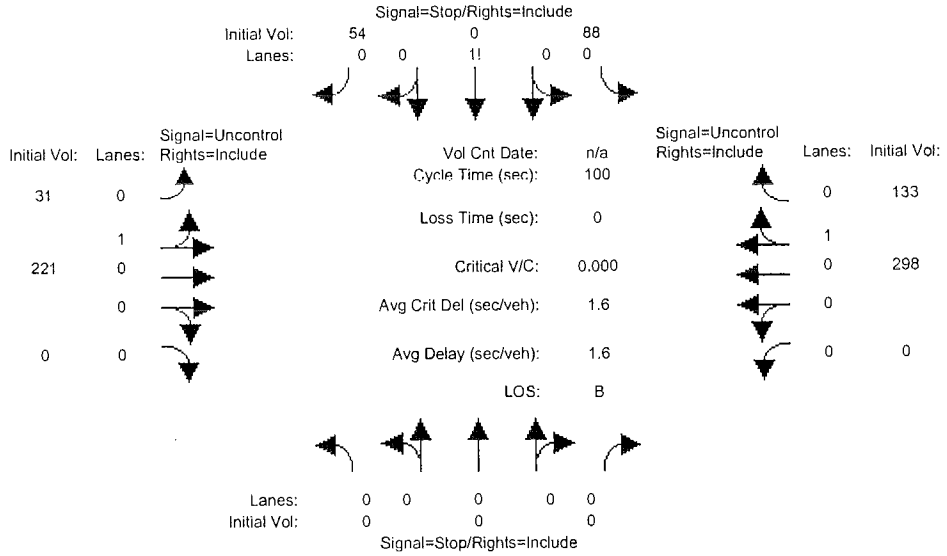
Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph5PM

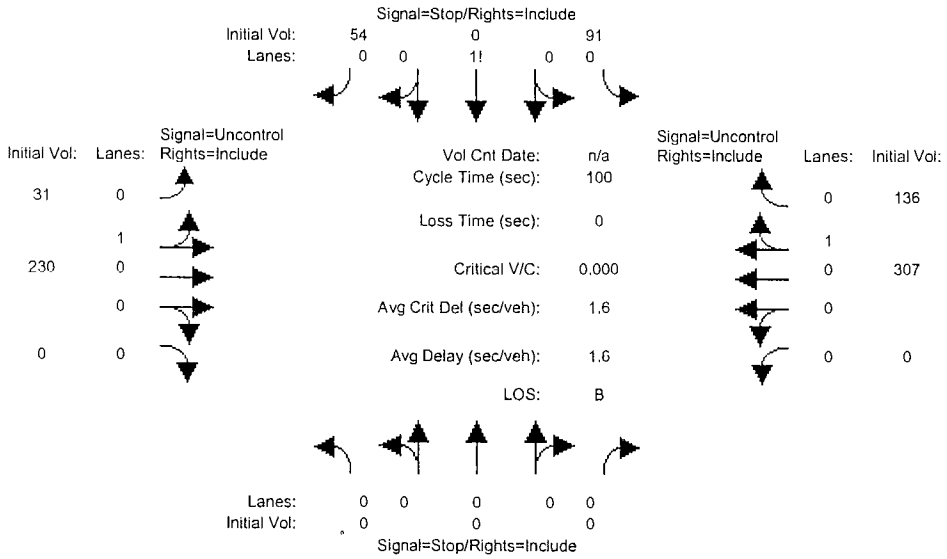
Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	53	0	50	29	109	0	0	160	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	53	0	50	29	109	0	0	160	98
Added Vol:	0	0	0	30	0	0	0	74	0	0	74	30
ApprovedDev:	0	0	0	5	0	4	2	38	0	0	64	5
Initial Fut:	0	0	0	88	0	54	31	221	0	0	298	133
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	88	0	54	31	221	0	0	298	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	88	0	54	31	221	0	0	298	133
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	97	0	59	34	221	0	0	298	133
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	617	xxxx	365	431	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	465	xxxx	905	1068	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.96	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	448	xxxx	905	1068	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	10.0	xxxx	4.2	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	555	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	7.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			7.8			0.5			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph6PM

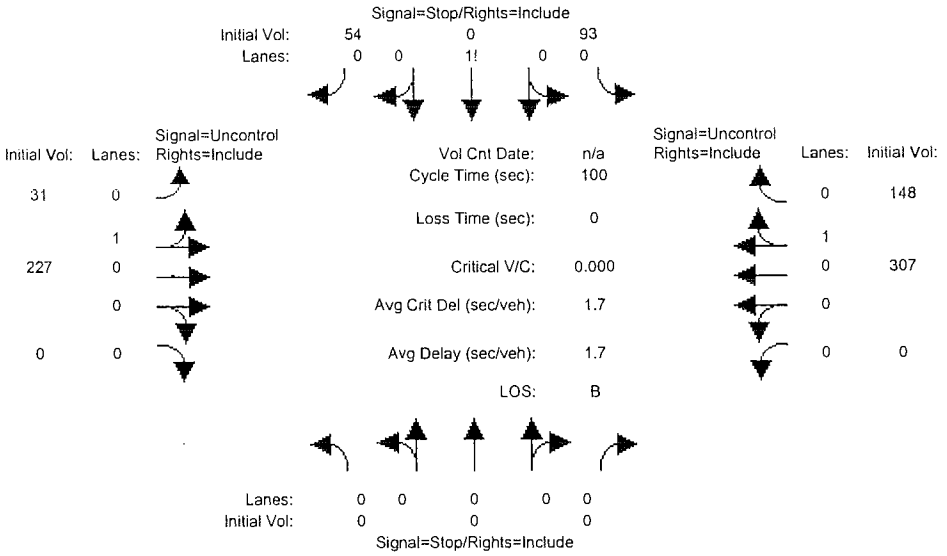
Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	53	0	50	29	109	0	0	160	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	53	0	50	29	109	0	0	160	98
Added Vol:	0	0	0	33	0	0	0	83	0	0	83	33
ApprovedDev:	0	0	0	5	0	4	2	38	0	0	64	5
Initial Fut:	0	0	0	91	0	54	31	230	0	0	307	136
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	91	0	54	31	230	0	0	307	136
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	91	0	54	31	230	0	0	307	136
Adjusted Volume Module:												
Grade:		0%			0%			0%			0%	
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	100	0	59	34	230	0	0	307	136
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	636	xxxx	375	443	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	453	xxxx	894	1054	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.96	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	437	xxxx	894	1054	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	10.4	xxxx	4.3	3.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	539	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	8.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:		0.0			8.1			0.5			0.0	

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
CumPM

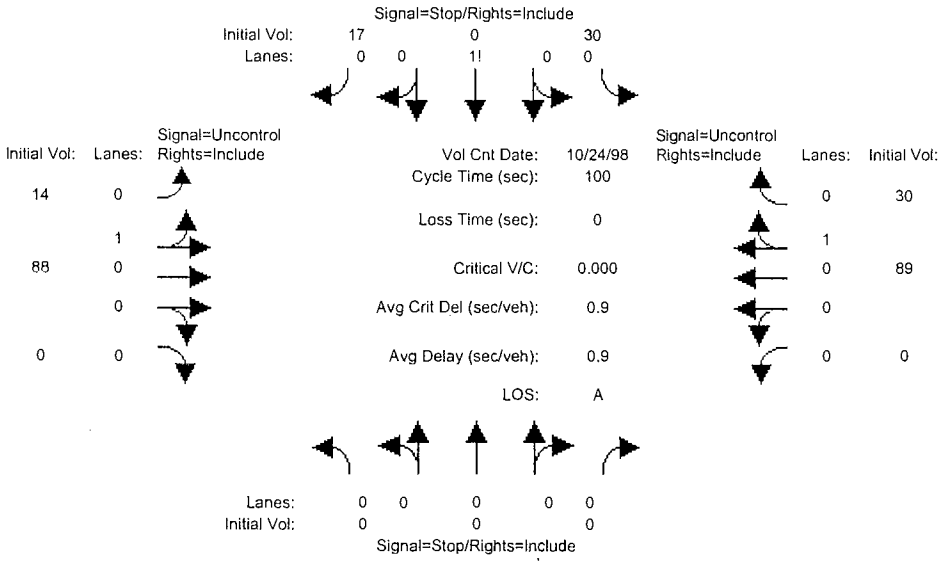
Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	53	0	50	29	106	0	0	160	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	53	0	50	29	106	0	0	160	98
Added Vol:	0	0	0	33	0	0	0	83	0	0	83	33
App+Pending:	0	0	0	7	0	4	2	38	0	0	64	17
Initial Fut:	0	0	0	93	0	54	31	227	0	0	307	148
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	93	0	54	31	227	0	0	307	148
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	93	0	54	31	227	0	0	307	148
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	102	0	59	34	227	0	0	307	148
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	639	xxxx	381	455	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	452	xxxx	888	1041	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.96	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	435	xxxx	888	1041	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	10.5	xxxx	4.3	3.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	535	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	8.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			8.3			0.5			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
ExistSat

Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 24 Oct 1998 << Sat Peak												
Base Vol:	0	0	0	30	0	17	14	88	0	0	89	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	0	17	14	88	0	0	89	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	30	0	17	14	88	0	0	89	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	30	0	17	14	88	0	0	89	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	30	0	17	14	88	0	0	89	30
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	33	0	19	15	88	0	0	89	30
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	206	xxxx	104	119	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	805	xxxx	1226	1504	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.99	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	796	xxxx	1226	1504	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	4.7	xxxx	3.0	2.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	912	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	4.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	*	*	*	*	*	*
ApproachDel:	0.0			4.1			0.4			0.0		

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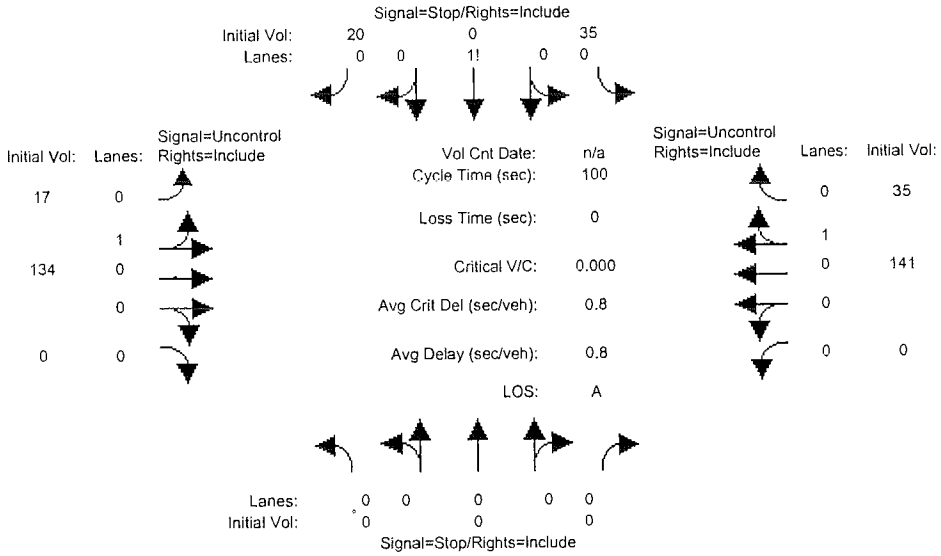
Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
BackSat

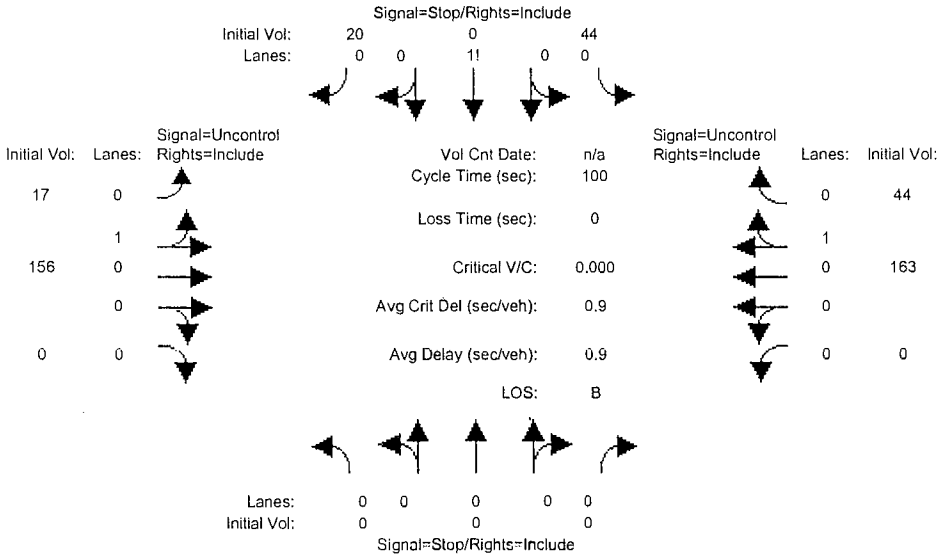
Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	30	0	17	14	88	0	0	89	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	0	17	14	88	0	0	89	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ApprovedDev:	0	0	0	5	0	3	3	46	0	0	52	5
Initial Fut:	0	0	0	35	0	20	17	134	0	0	141	35
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	35	0	20	17	134	0	0	141	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	35	0	20	17	134	0	0	141	35
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	39	0	22	19	134	0	0	141	35
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	310	xxxx	159	176	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	701	xxxx	1151	1413	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.99	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	691	xxxx	1151	1413	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	5.5	xxxx	3.2	2.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	808	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	4.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	*	*	*	*	*	*
ApproachDel:	0.0			4.7			0.3			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph2Sat

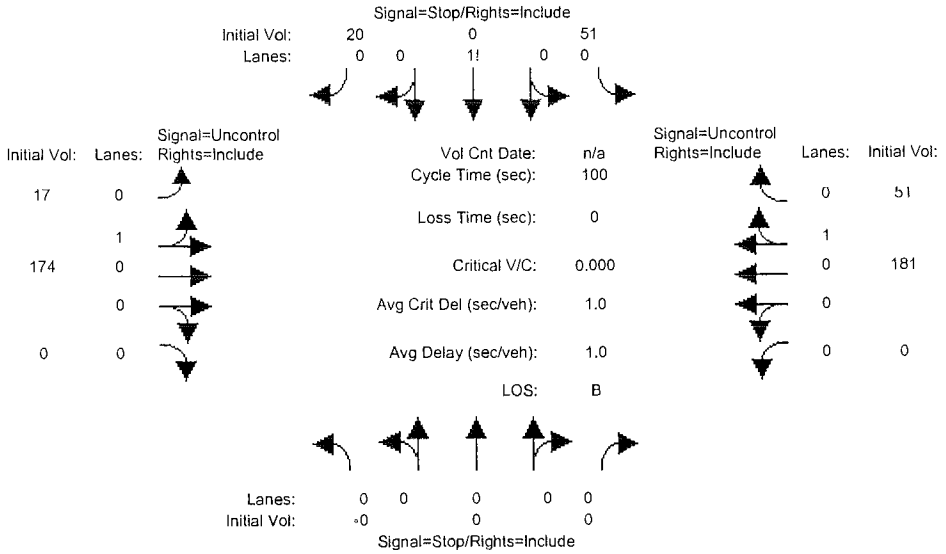
Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	30	0	17	14	88	0	0	89	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	0	17	14	88	0	0	89	30
Added Vol:	0	0	0	9	0	0	0	22	0	0	22	9
ApprovedDev:	0	0	0	5	0	3	3	46	0	0	52	5
Initial Fut:	0	0	0	44	0	20	17	156	0	0	163	44
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	44	0	20	17	156	0	0	163	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	44	0	20	17	156	0	0	163	44
Adjusted Volume Module:												
Grade:		0%			0%			0%			0%	
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	48	0	22	19	156	0	0	163	44
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	358	xxxx	185	207	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	657	xxxx	1116	1366	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.98	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	647	xxxx	1116	1366	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	6.0	xxxx	3.3	2.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	745	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	5.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:		0.0			5.1			0.3			0.0	

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph3Sat

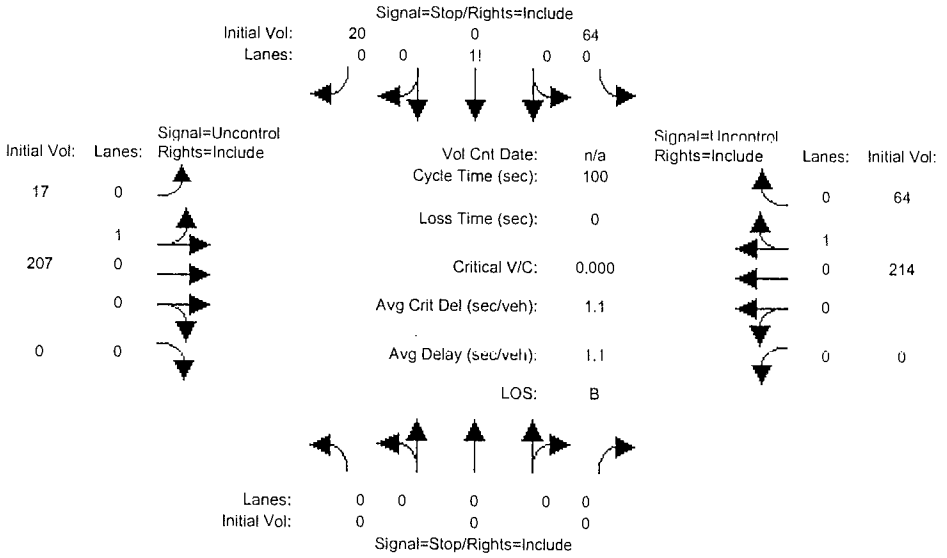
Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	30	0	17	14	88	0	0	89	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	0	17	14	88	0	0	89	30
Added Vol:	0	0	0	16	0	0	0	40	0	0	40	16
ApprovedDev:	0	0	0	5	0	3	3	46	0	0	52	5
Initial Fut:	0	0	0	51	0	20	17	174	0	0	181	51
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	51	0	20	17	174	0	0	181	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	51	0	20	17	174	0	0	181	51
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	56	0	22	19	174	0	0	181	51
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	398	xxxx	207	232	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	623	xxxx	1088	1329	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.98	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	613	xxxx	1088	1329	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	6.4	xxxx	3.4	2.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	699	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	5.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			5.5			0.3			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph4Sat

Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	30	0	17	14	88	0	0	89	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	0	17	14	88	0	0	89	30
Added Vol:	0	0	0	29	0	0	0	73	0	0	73	29
ApprovedDev:	0	0	0	5	0	3	3	46	0	0	52	5
Initial Fut:	0	0	0	64	0	20	17	207	0	0	214	64
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	64	0	20	17	207	0	0	214	64
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	64	0	20	17	207	0	0	214	64
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	70	0	22	19	207	0	0	214	64
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	470	xxxx	246	278	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	566	xxxx	1039	1264	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.98	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	556	xxxx	1039	1264	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	7.3	xxxx	3.5	2.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	625	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	6.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			6.4			0.2			0.0		

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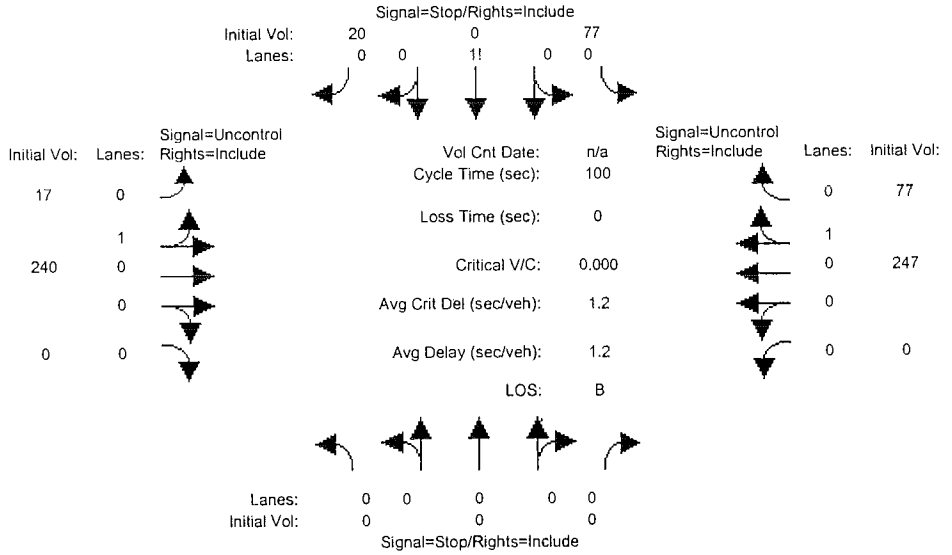
Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph5Sat

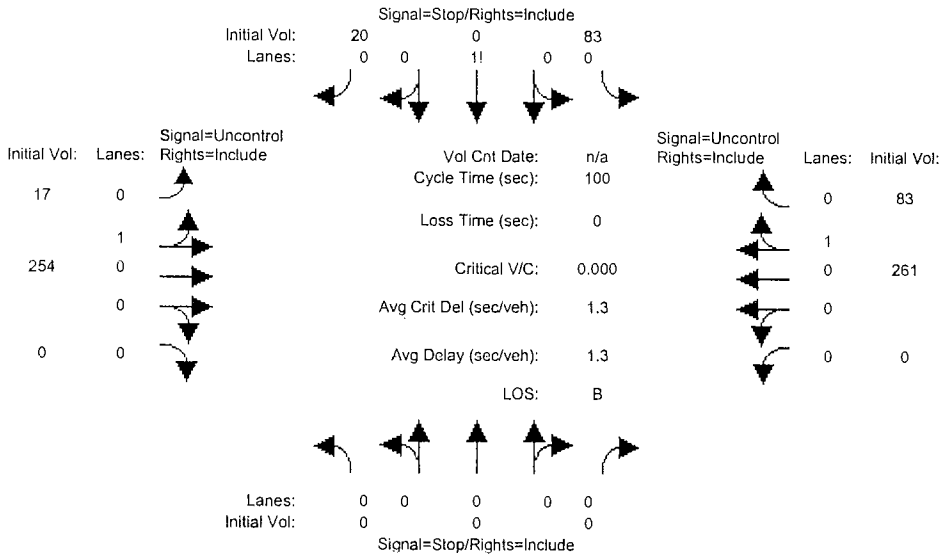
Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	30	0	17	14	88	0	0	89	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	0	17	14	88	0	0	89	30
Added Vol:	0	0	0	42	0	0	0	106	0	0	106	42
ApprovedDev:	0	0	0	5	0	3	3	46	0	0	52	5
Initial Fut:	0	0	0	77	0	20	17	240	0	0	247	77
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	77	0	20	17	240	0	0	247	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	77	0	20	17	240	0	0	247	77
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	85	0	22	19	240	0	0	247	77
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	543	xxxx	286	324	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	514	xxxx	992	1201	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.98	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	504	xxxx	992	1201	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	8.4	xxxx	3.7	3.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	561	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	7.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			7.4			0.2			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph6Sat

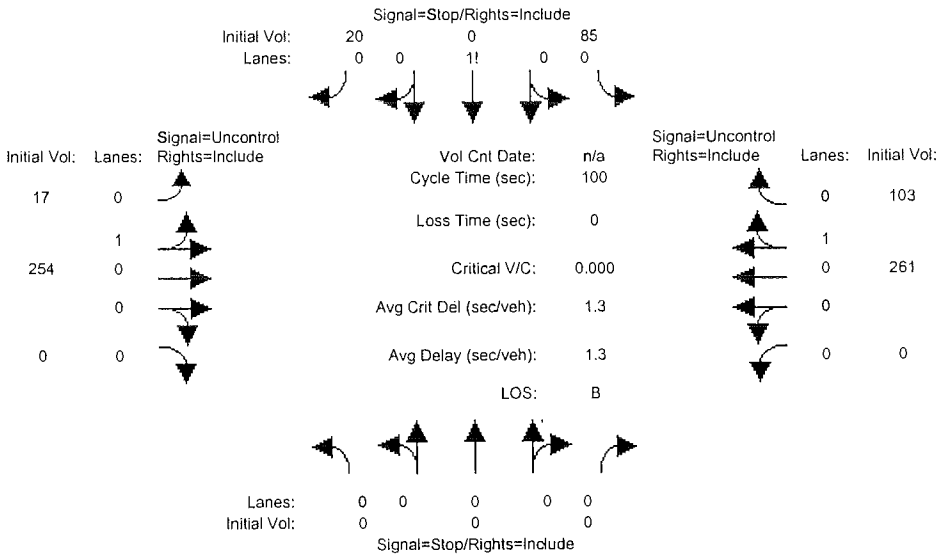
Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	30	0	17	14	88	0	0	89	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	0	17	14	88	0	0	89	30
Added Vol:	0	0	0	48	0	0	0	120	0	0	120	48
ApprovedDev:	0	0	0	5	0	3	3	46	0	0	52	5
Initial Fut:	0	0	0	83	0	20	17	254	0	0	261	83
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	83	0	20	17	254	0	0	261	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	83	0	20	17	254	0	0	261	83
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	91	0	22	19	254	0	0	261	83
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	574	xxxx	303	344	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	493	xxxx	973	1175	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.98	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	484	xxxx	973	1175	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	9.0	xxxx	3.8	3.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	536	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	8.0	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			8.0			0.2			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
CumSat

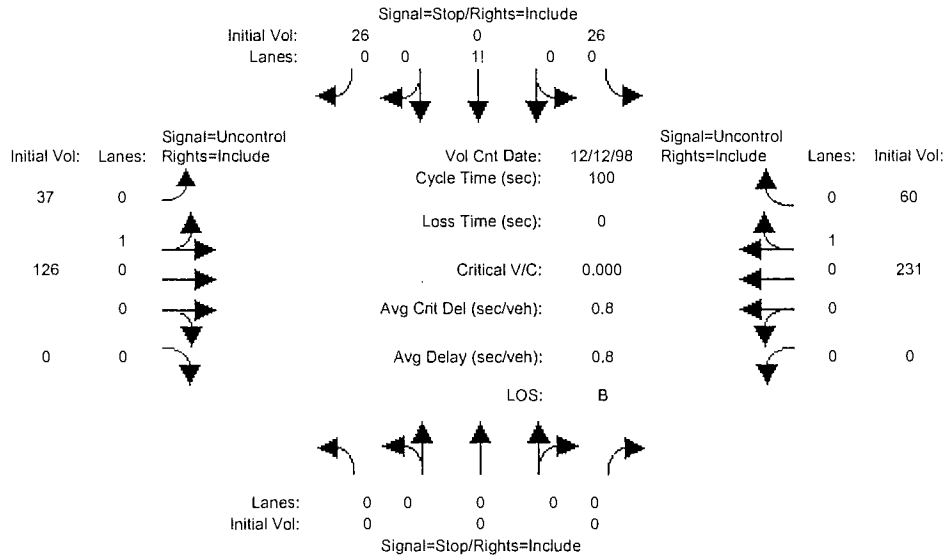
Intersection #1: Luchessa/Princevalle



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	30	0	17	14	88	0	0	89	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	0	17	14	88	0	0	89	30
Added Vol:	0	0	0	48	0	0	0	120	0	0	120	48
App+Pending:	0	0	0	7	0	3	3	46	0	0	52	25
Initial Fut:	0	0	0	85	0	20	17	254	0	0	261	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	85	0	20	17	254	0	0	261	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	85	0	20	17	254	0	0	261	103
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	94	0	22	19	254	0	0	261	103
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	584	xxxx	313	364	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	486	xxxx	962	1150	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.98	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	477	xxxx	962	1150	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	9.2	xxxx	3.8	3.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	528	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	8.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			8.2			0.2			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
ExistPM

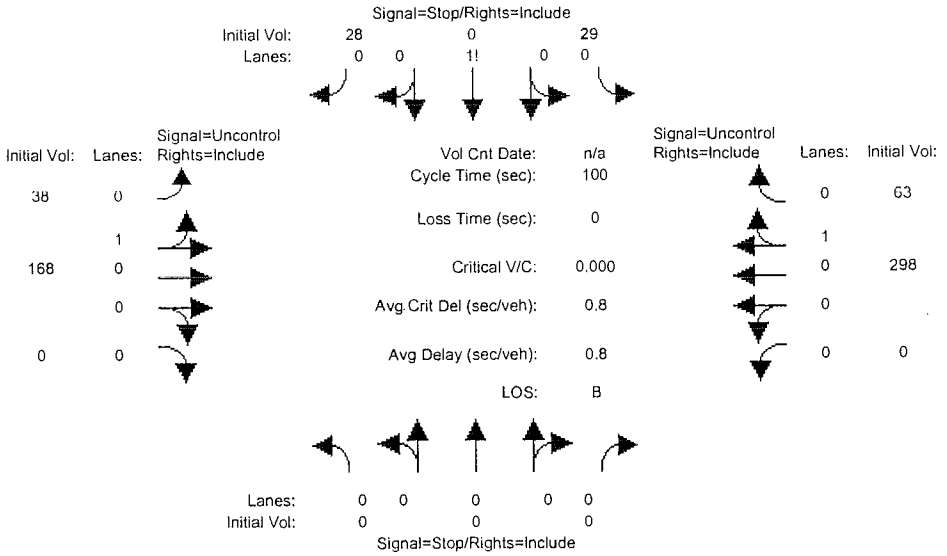
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 12 Dec 1998 << PM Peak												
Base Vol:	0	0	0	26	0	26	37	126	0	0	231	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	26	0	26	37	126	0	0	231	60
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	26	0	26	37	126	0	0	231	60
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	26	0	26	37	126	0	0	231	60
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	26	0	26	37	126	0	0	231	60
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	29	0	29	41	126	0	0	231	60
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	424	xxxx	261	291	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	602	xxxx	1021	1246	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.96	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	580	xxxx	1021	1246	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	6.5	xxxx	3.6	3.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	740	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	5.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			5.1			0.7			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
BackPM

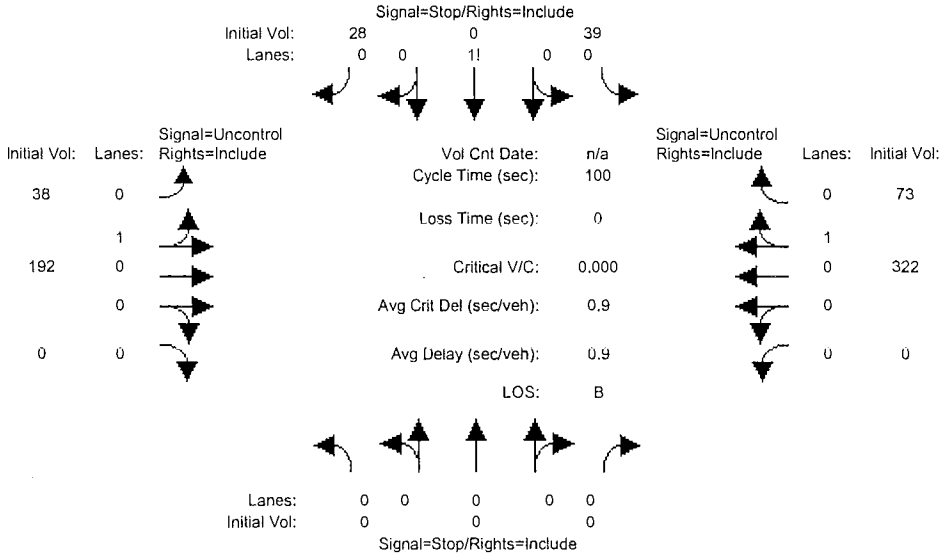
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	26	0	26	37	126	0	0	231	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	26	0	26	37	126	0	0	231	60
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved:	0	0	0	3	0	2	1	42	0	0	67	3
Initial Fut:	0	0	0	29	0	28	38	168	0	0	298	63
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	29	0	28	38	168	0	0	298	63
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	29	0	28	38	168	0	0	298	63
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	32	0	31	42	168	0	0	298	63
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	536	xxxx	330	361	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	518	xxxx	943	1154	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.96	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	498	xxxx	943	1154	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	7.7	xxxx	3.9	3.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	648	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	5.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			5.8			0.6			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph2PM

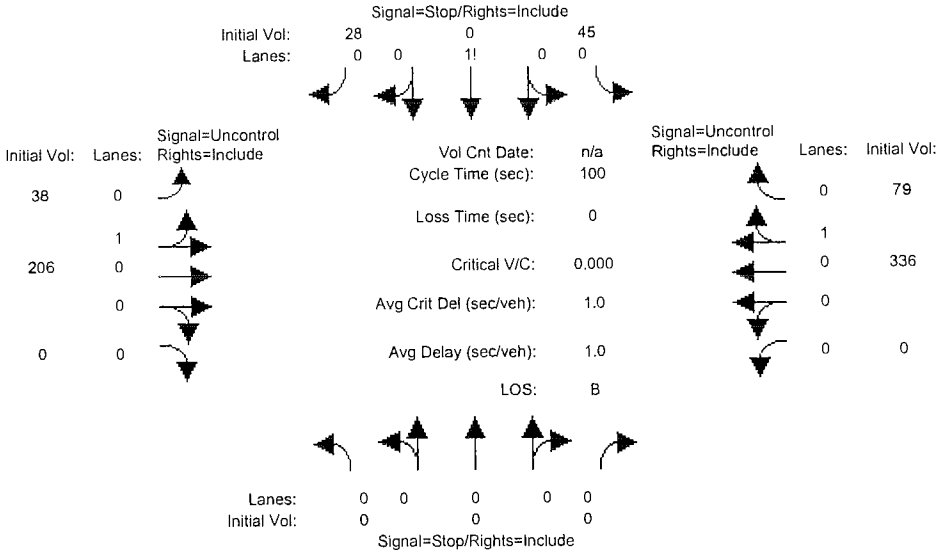
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	26	0	26	37	126	0	0	231	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	26	0	26	37	126	0	0	231	60
Added Vol:	0	0	0	10	0	0	0	24	0	0	24	10
Approved:	0	0	0	3	0	2	1	42	0	0	67	3
Initial Fut:	0	0	0	39	0	28	38	192	0	0	322	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	39	0	28	38	192	0	0	322	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	39	0	28	38	192	0	0	322	73
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	43	0	31	42	192	0	0	322	73
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	589	xxxx	359	395	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	483	xxxx	911	1111	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.96	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	463	xxxx	911	1111	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	8.5	xxxx	4.1	3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	582	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	6.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			6.6			0.6			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph3PM

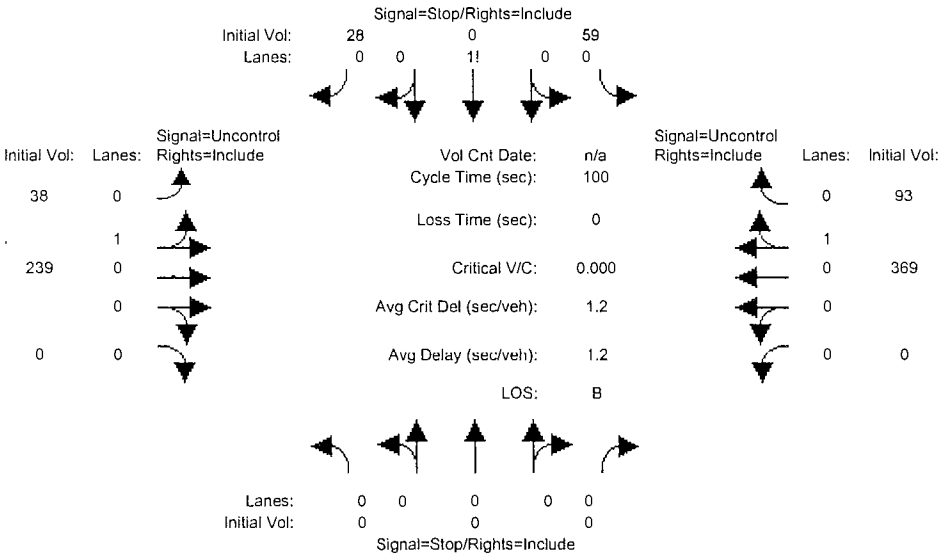
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	26	0	26	37	126	0	0	231	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	26	0	26	37	126	0	0	231	60
Added Vol:	0	0	0	16	0	0	0	38	0	0	38	16
Approved:	0	0	0	3	0	2	1	42	0	0	67	3
Initial Fut:	0	0	0	45	0	28	38	206	0	0	336	79
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	45	0	28	38	206	0	0	336	79
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	45	0	28	38	206	0	0	336	79
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	50	0	31	42	206	0	0	336	79
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	620	xxxx	376	415	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	464	xxxx	893	1087	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.96	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	443	xxxx	893	1087	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	9.0	xxxx	4.2	3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	549	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	7.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			7.2			0.6			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph4PM

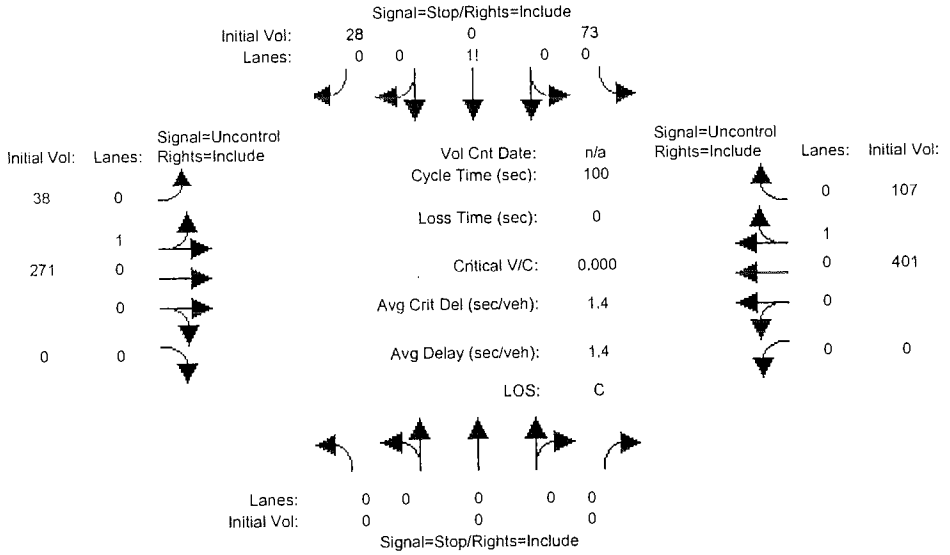
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	26	0	26	37	126	0	0	231	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	26	0	26	37	126	0	0	231	60
Added Vol:	0	0	0	30	0	0	0	71	0	0	71	30
Approved:	0	0	0	3	0	2	1	42	0	0	67	3
Initial Fut:	0	0	0	59	0	28	38	239	0	0	369	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	59	0	28	38	239	0	0	369	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	59	0	28	38	239	0	0	369	93
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	65	0	31	42	239	0	0	369	93
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	693	xxxx	416	462	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	421	xxxx	853	1033	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.95	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	401	xxxx	853	1033	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	10.5	xxxx	4.4	3.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	483	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	8.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			8.5			0.5			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph5PM

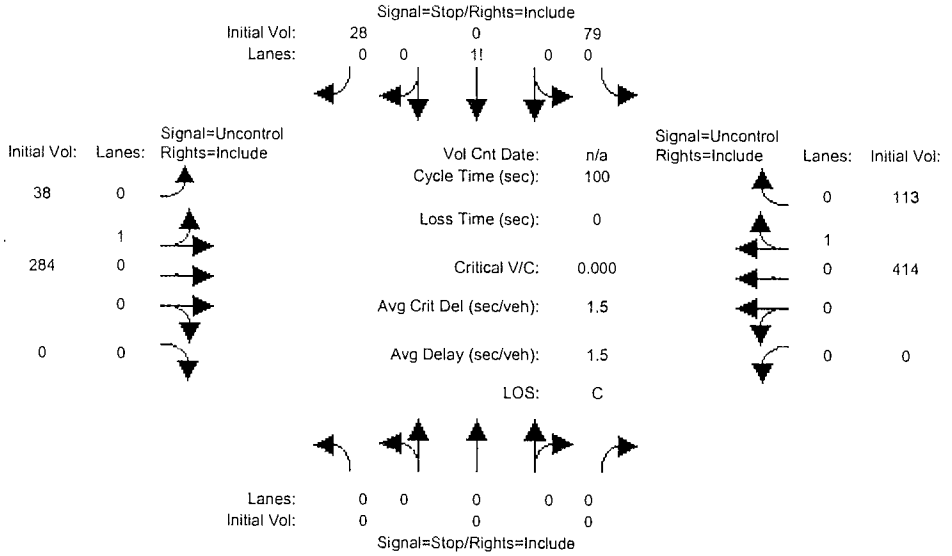
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	26	0	26	37	126	0	0	231	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	26	0	26	37	126	0	0	231	60
Added Vol:	0	0	0	44	0	0	0	103	0	0	103	44
Approved:	0	0	0	3	0	2	1	42	0	0	67	3
Initial Fut:	0	0	0	73	0	28	38	271	0	0	401	107
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	73	0	28	38	271	0	0	401	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	73	0	28	38	271	0	0	401	107
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	80	0	31	42	271	0	0	401	107
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	764	xxxx	455	508	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	383	xxxx	815	982	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.95	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	363	xxxx	815	982	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	12.4	xxxx	4.6	3.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	429	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	10.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	0.0			10.2			0.5			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph6PM

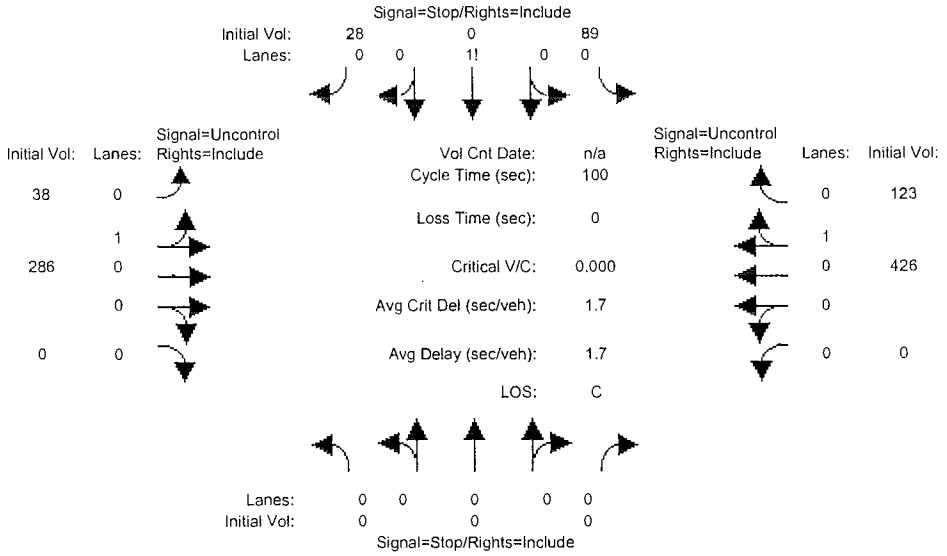
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	26	0	26	37	126	0	0	231	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	26	0	26	37	126	0	0	231	60
Added Vol:	0	0	0	50	0	0	0	116	0	0	116	50
Approved:	0	0	0	3	0	2	1	42	0	0	67	3
Initial Fut:	0	0	0	79	0	28	38	284	0	0	414	113
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	79	0	28	38	284	0	0	414	113
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	79	0	28	38	284	0	0	414	113
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	87	0	31	42	284	0	0	414	113
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	793	xxxx	471	527	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	368	xxxx	800	962	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.95	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	349	xxxx	800	962	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	13.3	xxxx	4.7	3.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	409	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	11.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	0.0			11.1			0.5			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
CumlPM

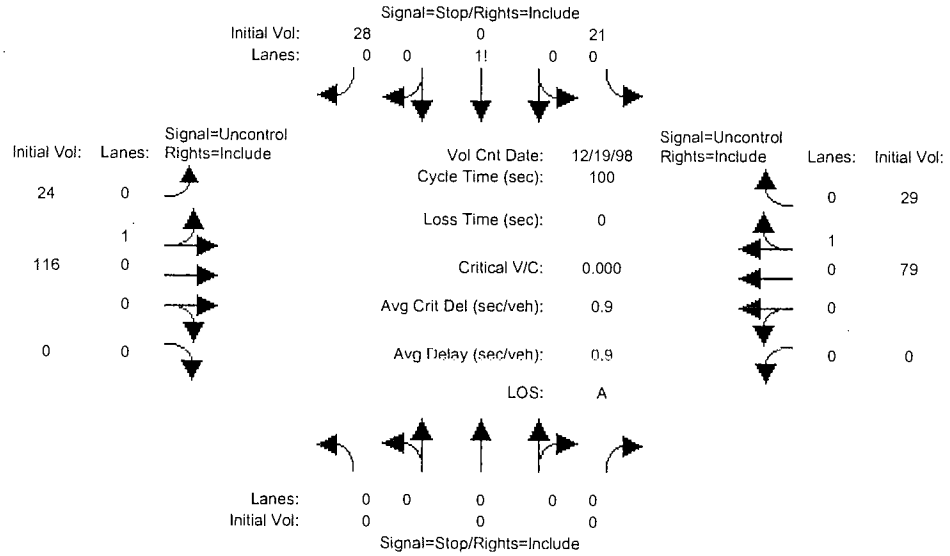
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	26	0	26	37	126	0	0	231	60
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	26	0	26	37	126	0	0	231	60
Added Vol:	0	0	0	50	0	0	0	116	0	0	116	50
App+Pending:	0	0	0	13	0	2	1	44	0	0	79	13
Initial Fut:	0	0	0	89	0	28	38	286	0	0	426	123
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	89	0	28	38	286	0	0	426	123
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	89	0	28	38	286	0	0	426	123
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	98	0	31	42	286	0	0	426	123
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	812	xxxx	488	549	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	359	xxxx	784	939	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.95	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	340	xxxx	784	939	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	14.4	xxxx	4.8	4.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	393	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	12.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	0.0			12.1			0.5			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
ExistSat

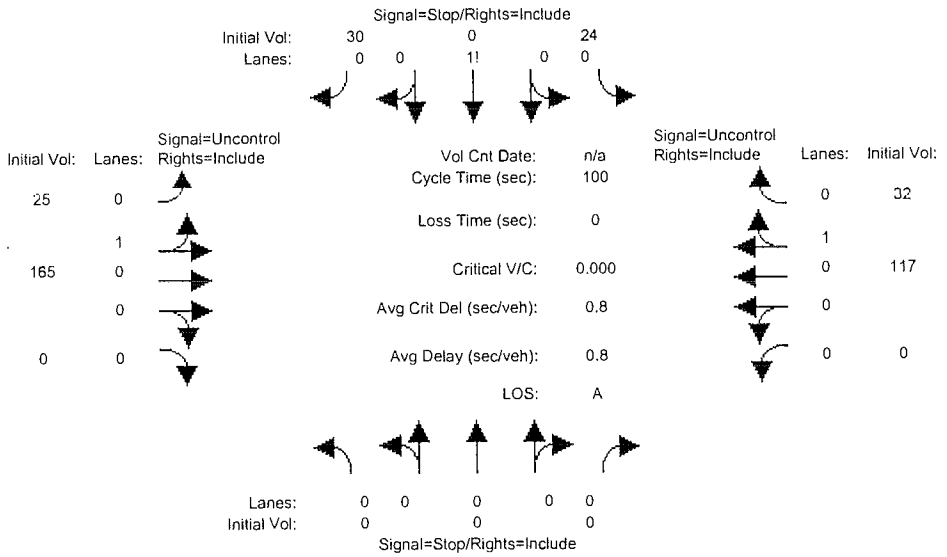
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 19 Dec 1998 <<												
Base Vol:	0	0	0	21	0	28	24	116	0	0	79	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	21	0	28	24	116	0	0	79	29
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	21	0	28	24	116	0	0	79	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	21	0	28	24	116	0	0	79	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	21	0	28	24	116	0	0	79	29
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	23	0	31	26	116	0	0	79	29
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	234	xxxx	94	108	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	776	xxxx	1242	1523	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.98	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	761	xxxx	1242	1523	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	4.9	xxxx	3.0	2.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	977	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	3.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	*	*	*	*	*	*
ApproachDel:	0.0			3.8			0.4			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
BackSat

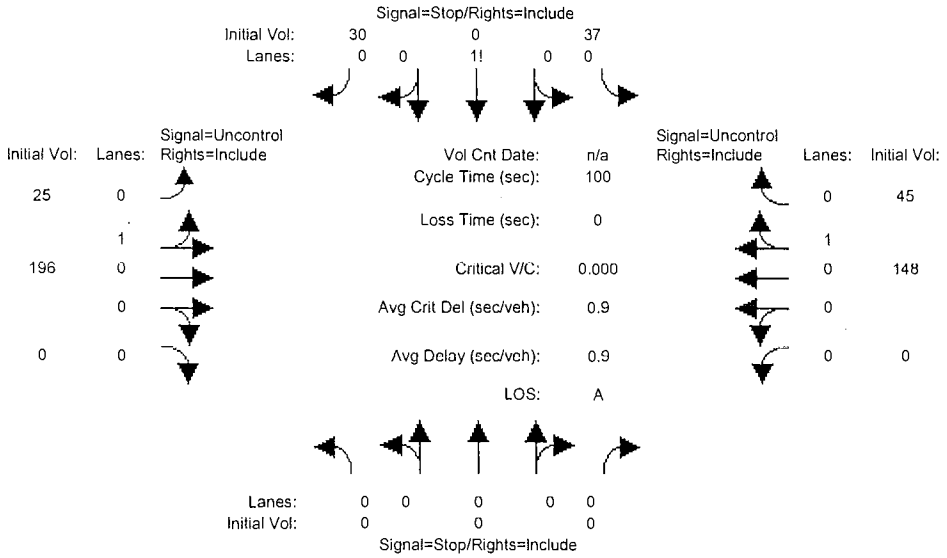
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	21	0	28	24	116	0	0	79	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	21	0	28	24	116	0	0	79	29
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved:	0	0	0	3	0	2	1	49	0	0	38	3
Initial Fut:	0	0	0	24	0	30	25	165	0	0	117	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	24	0	30	25	165	0	0	117	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	24	0	30	25	165	0	0	117	32
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	26	0	33	28	165	0	0	117	32
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	323	xxxx	133	149	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	688	xxxx	1186	1456	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.98	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	674	xxxx	1186	1456	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	5.5	xxxx	3.1	2.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	886	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	4.2	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	*	*	*	*	*	*
ApproachDel:	0.0			4.2			0.4			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph2Sat

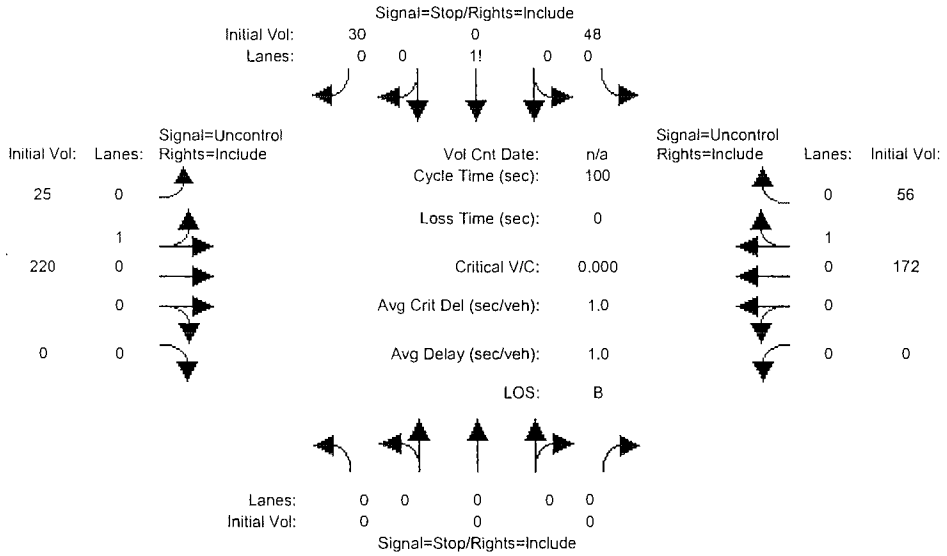
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	21	0	28	24	116	0	0	79	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	21	0	28	24	116	0	0	79	29
Added Vol:	0	0	0	13	0	0	0	31	0	0	31	13
Approved:	0	0	0	3	0	2	1	49	0	0	38	3
Initial Fut:	0	0	0	37	0	30	25	196	0	0	148	45
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	37	0	30	25	196	0	0	148	45
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	37	0	30	25	196	0	0	148	45
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	41	0	33	28	196	0	0	148	45
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	392	xxxx	171	193	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	628	xxxx	1135	1387	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.98	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	614	xxxx	1135	1387	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	6.2	xxxx	3.3	2.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	773	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	4.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	A	*	*	*	*	*	*	*
ApproachDel:	0.0			4.9			0.3			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph3Sat

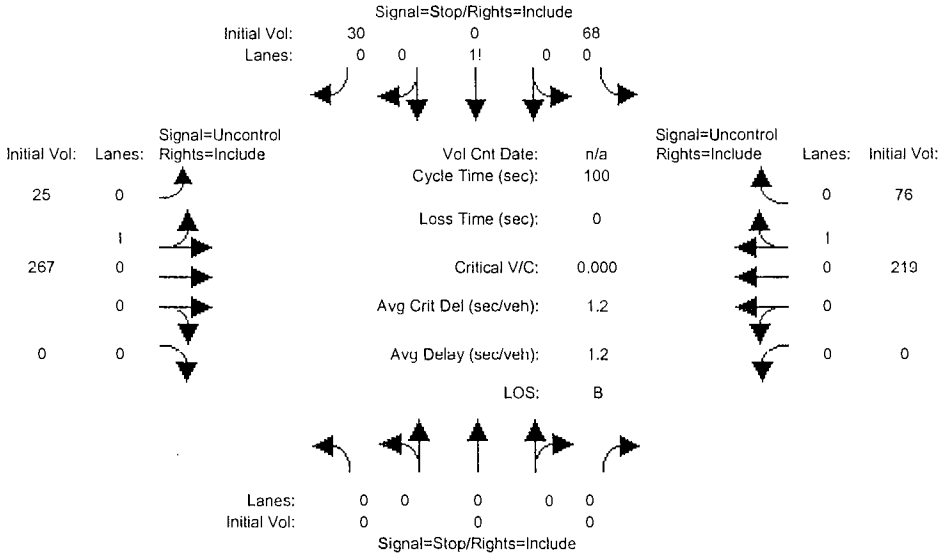
Intersection #2: Tuchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	21	0	28	24	116	0	0	79	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	21	0	28	24	116	0	0	79	29
Added Vol:	0	0	0	24	0	0	0	55	0	0	55	24
Approved:	0	0	0	3	0	2	1	49	0	0	38	3
Initial Fut:	0	0	0	48	0	30	25	220	0	0	172	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	48	0	30	25	220	0	0	172	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	48	0	30	25	220	0	0	172	56
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	53	0	33	28	220	0	0	172	56
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	445	xxxx	200	228	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	585	xxxx	1096	1335	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.98	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	571	xxxx	1096	1335	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	6.9	xxxx	3.4	2.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	700	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	5.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			5.5			0.3			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph4Sat

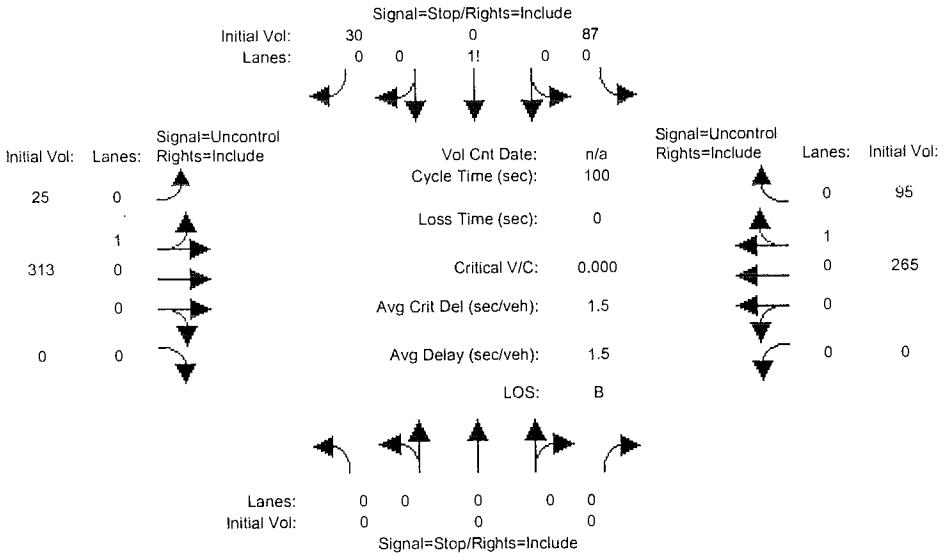
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	21	0	28	24	116	0	0	79	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	21	0	28	24	116	0	0	79	29
Added Vol:	0	0	0	44	0	0	0	102	0	0	102	44
Approved:	0	0	0	3	0	2	1	49	0	0	38	3
Initial Fut:	0	0	0	68	0	30	25	267	0	0	219	76
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	68	0	30	25	267	0	0	219	76
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	68	0	30	25	267	0	0	219	76
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	75	0	33	28	267	0	0	219	76
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	549	xxxx	257	295	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent. Cap.:	xxxx	xxxx	xxxxx	509	xxxx	1026	1240	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.97	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	496	xxxx	1026	1240	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	8.4	xxxx	3.6	3.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	589	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	6.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			6.9			0.3			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph5Sat

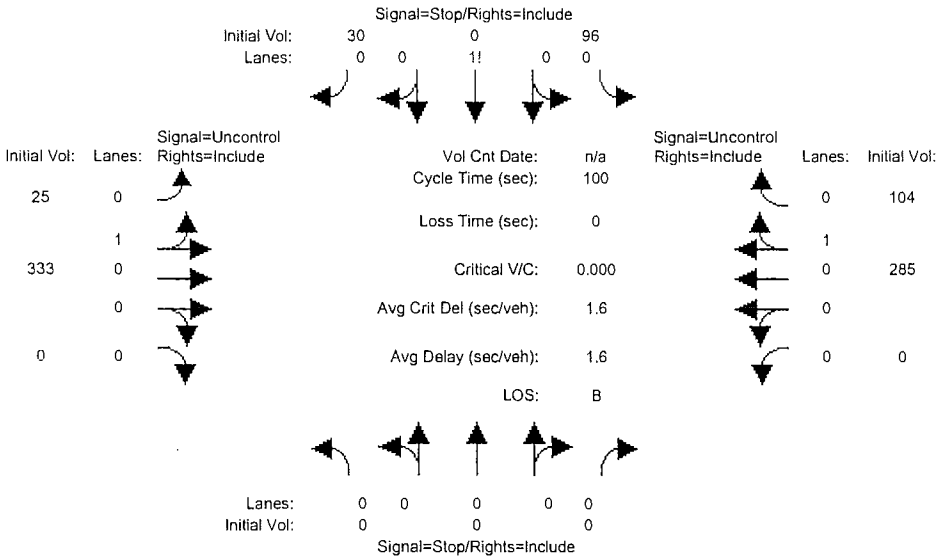
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	21	0	28	24	116	0	0	79	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	21	0	28	24	116	0	0	79	29
Added Vol:	0	0	0	63	0	0	0	148	0	0	148	63
Approved:	0	0	0	3	0	2	1	49	0	0	38	3
Initial Fut:	0	0	0	87	0	30	25	313	0	0	265	95
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	87	0	30	25	313	0	0	265	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	87	0	30	25	313	0	0	265	95
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	96	0	33	28	313	0	0	265	95
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	651	xxxx	313	360	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	445	xxxx	962	1155	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.97	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	432	xxxx	962	1155	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	10.4	xxxx	3.9	3.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	503	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	8.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			8.8			0.3			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph6Sat

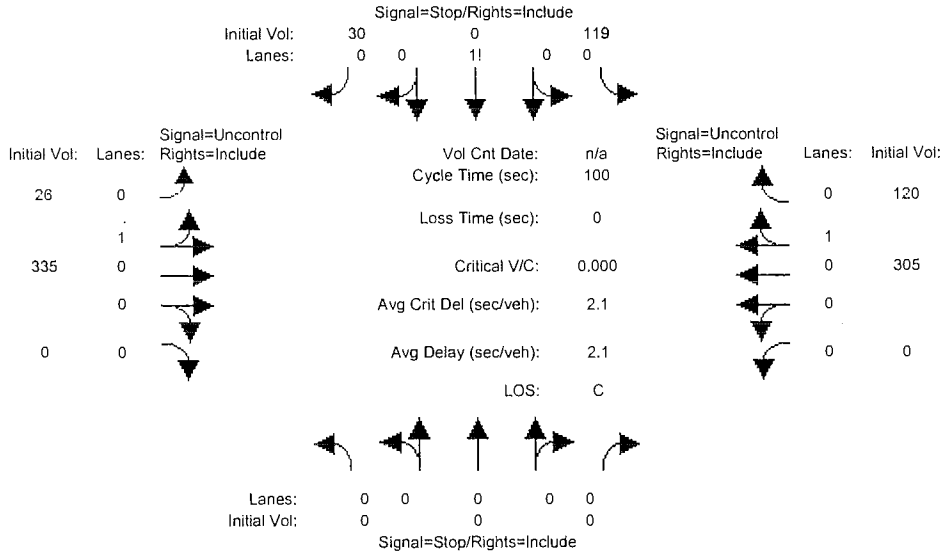
Intersection #2: Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	21	0	28	24	116	0	0	79	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	21	0	28	24	116	0	0	79	29
Added Vol:	0	0	0	72	0	0	0	168	0	0	168	72
Approved:	0	0	0	3	0	2	1	49	0	0	38	3
Initial Fut:	0	0	0	96	0	30	25	333	0	0	285	104
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	96	0	30	25	333	0	0	285	104
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	96	0	30	25	333	0	0	285	104
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	106	0	33	28	333	0	0	285	104
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	695	xxxx	337	389	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	419	xxxx	934	1119	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.97	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	406	xxxx	934	1119	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	11.6	xxxx	4.0	3.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	470	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	9.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	*	*	*	*	*	*
ApproachDel:	0.0			9.8			0.3			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
CumSat

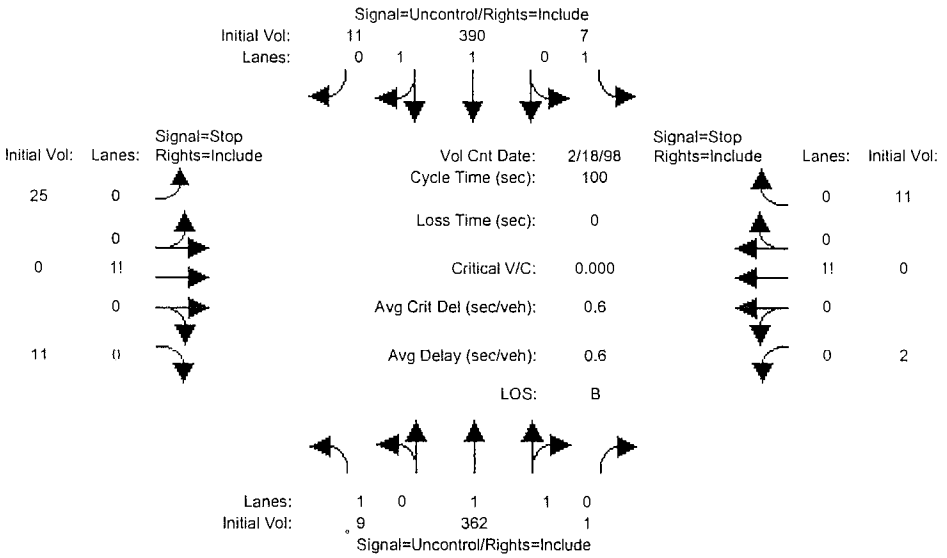
Intersection #2. Luchessa/Church



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	21	0	28	24	116	0	0	79	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	21	0	28	24	116	0	0	79	29
Added Vol:	0	0	0	72	0	0	0	168	0	0	168	72
App+Pending:	0	0	0	26	0	2	2	51	0	0	58	19
Initial Fut:	0	0	0	119	0	30	26	335	0	0	305	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	119	0	30	26	335	0	0	305	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	119	0	30	26	335	0	0	305	120
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	0	131	0	33	29	335	0	0	305	120
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	3.4	xxxx	2.6	2.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	6.5	xxxx	5.5	5.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	726	xxxx	365	425	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	402	xxxx	904	1075	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	0.97	xxxx	1.00	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	389	xxxx	904	1075	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	13.3	xxxx	4.1	3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	439	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	11.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	*	*	*	*	*	*
ApproachDel:	0.0			11.5			0.3			0.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
ExistPM

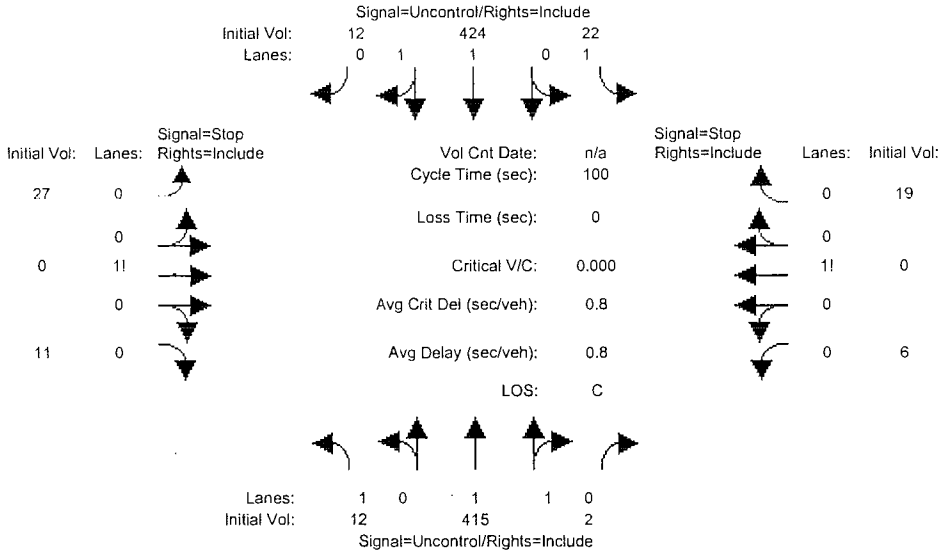
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 18 Feb 1998 << PM Peak												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	9	362	1	7	390	11	25	0	11	2	0	11
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	9	362	1	7	390	11	25	0	11	2	0	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	9	362	1	7	390	11	25	0	11	2	0	11
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	10	362	1	8	390	11	28	0	12	2	0	12
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	401	xxxx	xxxxx	363	xxxx	xxxxx	774	xxxx	201	769	xxxx	182
Potent Cap.:	1044	xxxx	xxxxx	1094	xxxx	xxxxx	339	xxxx	1096	342	xxxx	1120
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.98	xxxx	1.00	0.98	xxxx	1.00
Move Cap.:	1044	xxxx	xxxxx	1094	xxxx	xxxxx	331	xxxx	1096	334	xxxx	1120
Level Of Service Module:												
Stopped Del:	3.5	xxxx	xxxxx	3.3	xxxx	xxxxx	11.8	xxxx	3.3	10.9	xxxx	3.2
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	421	xxxxx	xxxx	822	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.2	xxxxx	xxxxx	4.4	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	A	*
ApproachDel:	0.1			0.1			9.2			4.4		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
BackPM

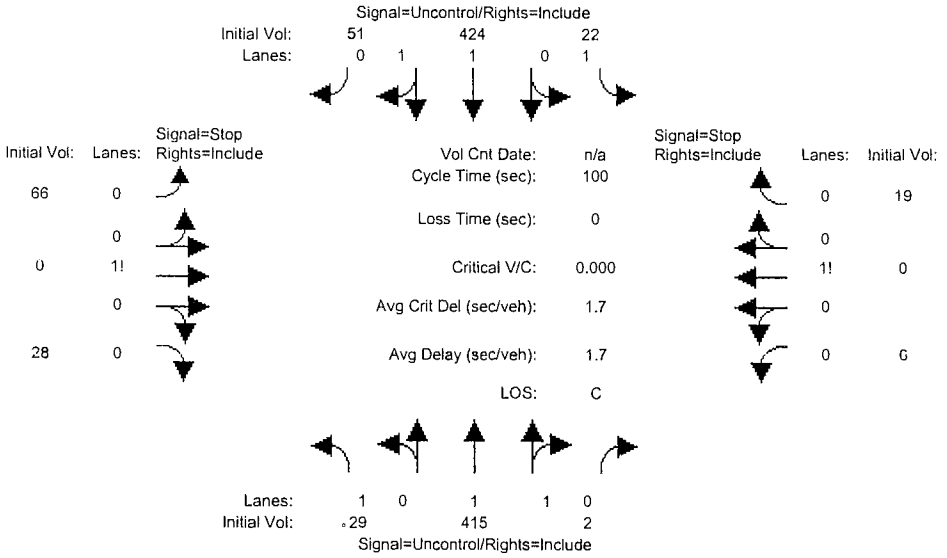
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ApprovedDev:	3	53	1	15	34	1	2	0	0	4	0	8
Initial Fut:	12	415	2	22	424	12	27	0	11	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	12	415	2	22	424	12	27	0	11	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	12	415	2	22	424	12	27	0	11	6	0	19
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	13	415	2	24	424	12	30	0	12	7	0	21
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	436	xxxx	xxxxx	417	xxxx	xxxxx	879	xxxx	218	874	xxxx	209
Potent Cap.:	1000	xxxx	xxxxx	1024	xxxx	xxxxx	290	xxxx	1074	292	xxxx	1086
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.95	xxxx	1.00	0.96	xxxx	1.00
Move Cap.:	1000	xxxx	xxxxx	1024	xxxx	xxxxx	277	xxxx	1074	281	xxxx	1086
Level Of Service Module:												
Stopped Del:	3.6	xxxx	xxxxx	3.6	xxxx	xxxxx	14.4	xxxx	3.4	13.1	xxxx	3.4
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	352	xxxxx	xxxx	644	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.2	xxxxx	xxxxx	5.7	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	B	*
ApproachDel:	0.1			0.2			11.2			5.7		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph2PM

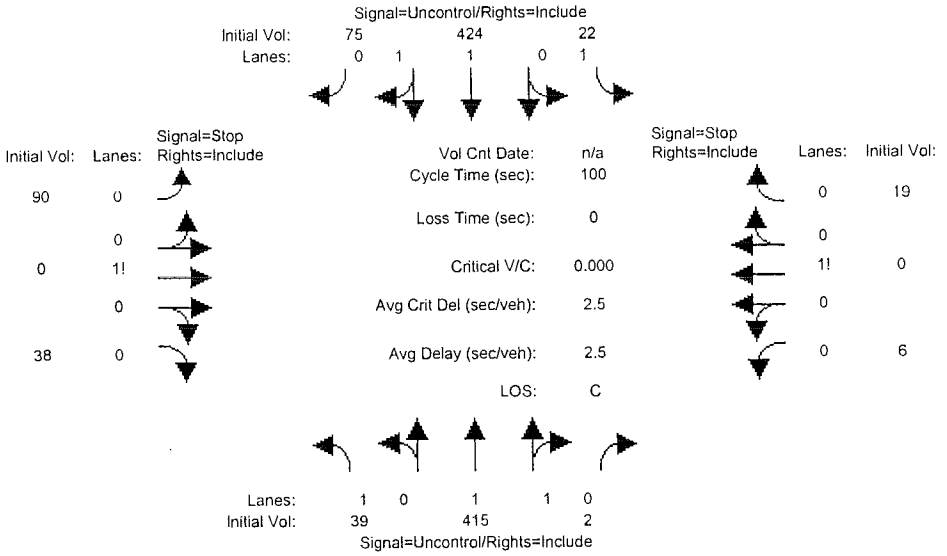
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	17	0	0	0	0	39	39	0	17	0	0	0
ApprovedDev:	3	53	1	15	34	1	2	0	0	4	0	8
Initial Fut:	29	415	2	22	424	51	66	0	28	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	29	415	2	22	424	51	66	0	28	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	29	415	2	22	424	51	66	0	28	6	0	19
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	32	415	2	24	424	51	73	0	31	7	0	21
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	475	xxxx	xxxxx	417	xxxx	xxxxx	916	xxxx	238	891	xxxx	209
Potent Cap.:	953	xxxx	xxxxx	1024	xxxx	xxxxx	275	xxxx	1050	285	xxxx	1086
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.94	xxxx	1.00	0.93	xxxx	1.00
Move Cap.:	953	xxxx	xxxxx	1024	xxxx	xxxxx	258	xxxx	1050	265	xxxx	1086
Level Of Service Module:												
Stopped Del:	3.9	xxxx	xxxxx	3.6	xxxx	xxxxx	18.7	xxxx	3.5	13.9	xxxx	3.4
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	333	xxxxx	xxxx	623	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.2	xxxxx	xxxxx	5.9	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	B	*
ApproachDel:		0.3			0.2			14.2			5.9	

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph3PM

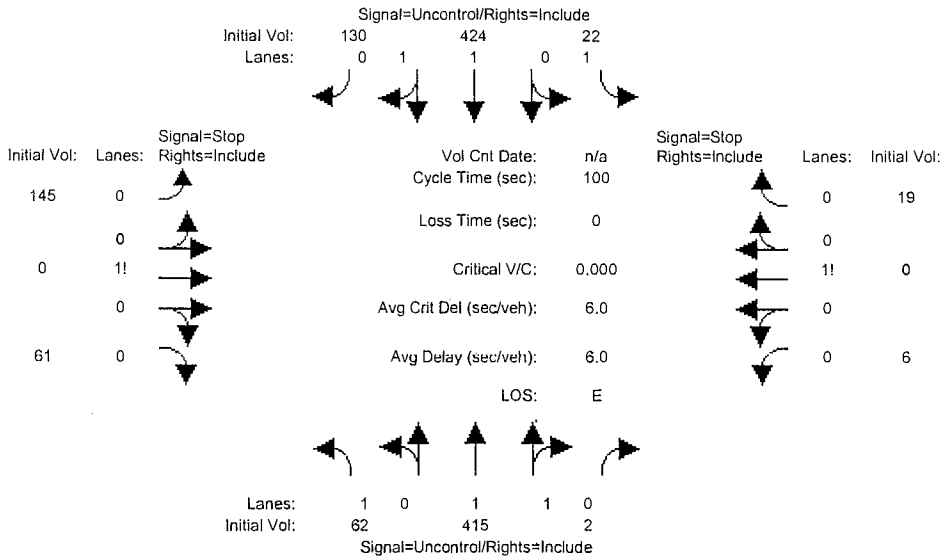
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	27	0	0	0	0	63	63	0	27	0	0	0
ApprovedDev:	3	53	1	15	34	1	2	0	0	4	0	8
Initial Fut:	39	415	2	22	424	75	90	0	38	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	39	415	2	22	424	75	90	0	38	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	39	415	2	22	424	75	90	0	38	6	0	19
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	43	415	2	24	424	75	99	0	42	7	0	21
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	499	xxxx	xxxxx	417	xxxx	xxxxx	938	xxxx	250	901	xxxx	209
Potent Cap.:	925	xxxx	xxxxx	1024	xxxx	xxxxx	266	xxxx	1035	281	xxxx	1086
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.93	xxxx	1.00	0.91	xxxx	1.00
Move Cap.:	925	xxxx	xxxxx	1024	xxxx	xxxxx	247	xxxx	1035	255	xxxx	1086
Level Of Service Module:												
Stopped Del:	4.1	xxxx	xxxxx	3.6	xxxx	xxxxx	22.8	xxxx	3.6	14.4	xxxx	3.4
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	320	xxxxx	xxxx	610	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	17.1	xxxxx	xxxxx	6.0	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	B	*
ApproachDel:	0.4			0.2			17.1			6.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph4PM

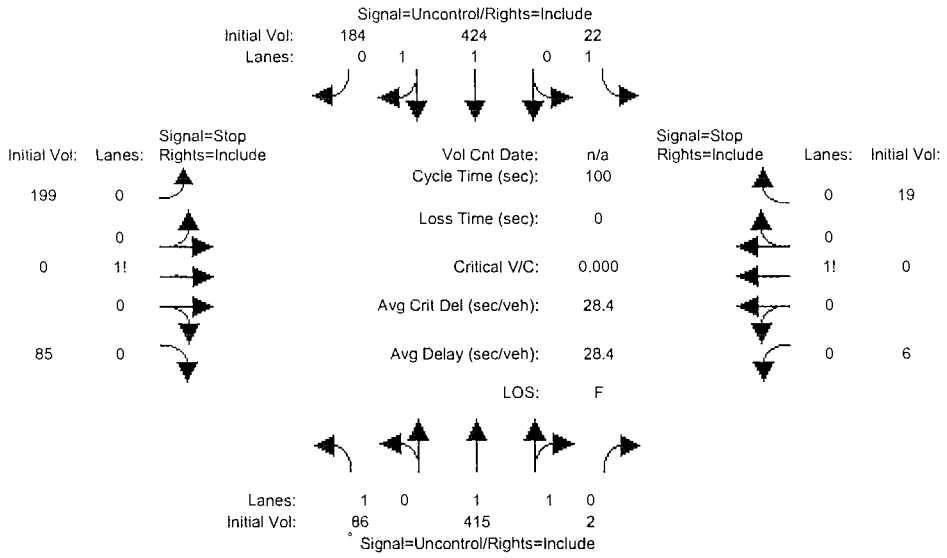
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	50	0	0	0	0	118	118	0	50	0	0	0
ApprovedDev:	3	53	1	15	34	1	2	0	0	4	0	8
Initial Fut:	62	415	2	22	424	130	145	0	61	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	62	415	2	22	424	130	145	0	61	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	62	415	2	22	424	130	145	0	61	6	0	19
Adjusted Volume Module:												
Grade:		0%			0%			0%			0%	
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	68	415	2	24	424	130	160	0	67	7	0	21
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	554	xxxx	xxxxx	417	xxxx	xxxxx	988	xxxx	277	924	xxxx	209
Potent Cap.:	864	xxxx	xxxxx	1024	xxxx	xxxxx	247	xxxx	1002	272	xxxx	1086
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.91	xxxx	1.00	0.86	xxxx	1.00
Move Cap.:	864	xxxx	xxxxx	1024	xxxx	xxxxx	224	xxxx	1002	234	xxxx	1086
Level Of Service Module:												
Stopped Del:	4.5	xxxx	xxxxx	3.6	xxxx	xxxxx	44.4	xxxx	3.8	15.8	xxxx	3.4
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	291	xxxxx	xxxx	579	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	32.4	xxxxx	xxxxx	6.4	xxxxx
Shared LOS:	*	*	*	*	*	*	*	E	*	*	B	*
ApproachDel:		0.6			0.2			32.4			6.4	

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph5PM

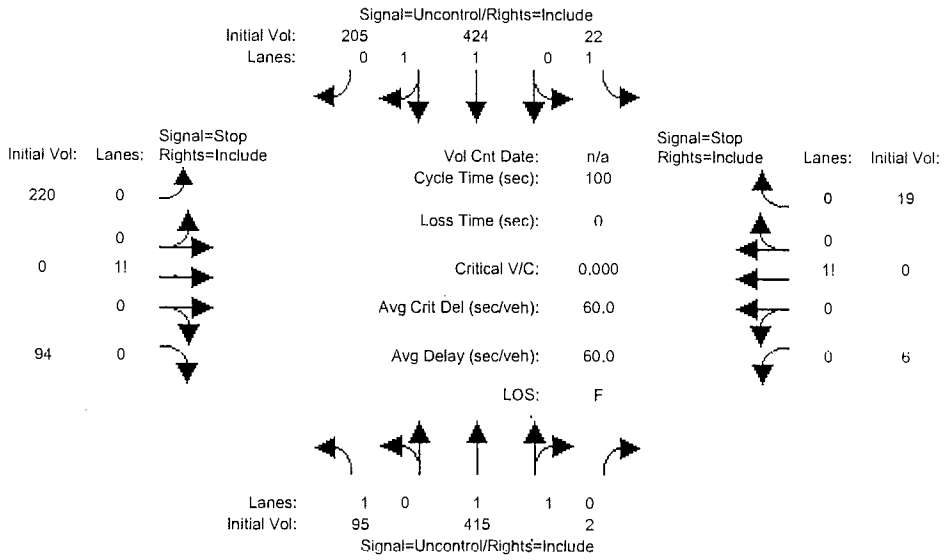
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	74	0	0	0	0	172	172	0	74	0	0	0
ApprovedDev:	3	53	1	15	34	1	2	0	0	4	0	8
Initial Fut:	86	415	2	22	424	184	199	0	85	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	86	415	2	22	424	184	199	0	85	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	86	415	2	22	424	184	199	0	85	6	0	19
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	95	415	2	24	424	184	219	0	94	7	0	21
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	608	xxxx	xxxxx	417	xxxx	xxxxx	1039	xxxx	304	948	xxxx	209
Potent Cap.:	809	xxxx	xxxxx	1024	xxxx	xxxxx	229	xxxx	971	262	xxxx	1086
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.88	xxxx	1.00	0.81	xxxx	1.00
Move Cap.:	809	xxxx	xxxxx	1024	xxxx	xxxxx	201	xxxx	971	212	xxxx	1086
Level Of Service Module:												
Stopped Del:	5.0	xxxx	xxxxx	3.6	xxxx	xxxxx	187.0	xxxx	4.1	17.5	xxxx	3.4
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	264	xxxxx	xxxx	546	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	132	xxxxx	xxxxx	6.8	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	B	*
ApproachDel:	0.9			0.1			132.3			6.8		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph6PM

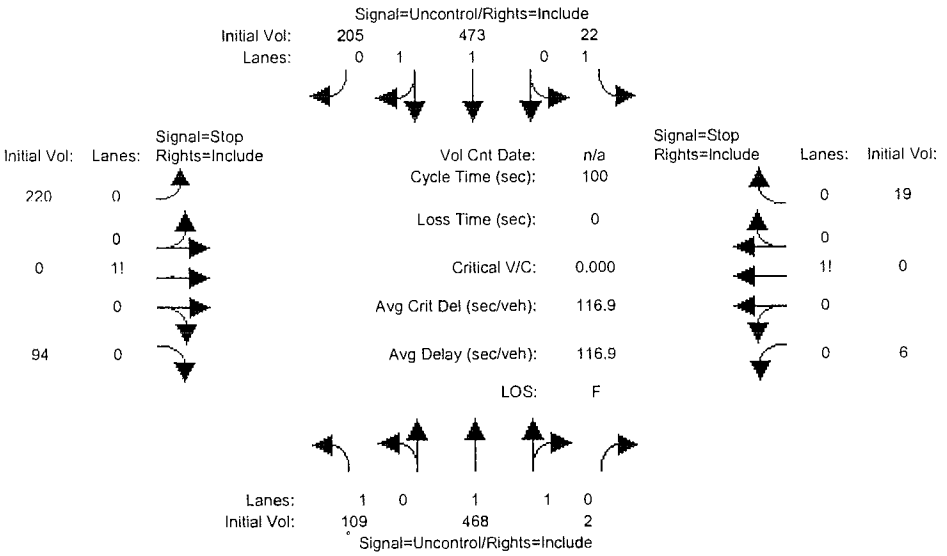
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	83	0	0	0	0	193	193	0	83	0	0	0
ApprovedDev:	3	53	1	15	34	1	2	0	0	4	0	8
Initial Fut:	95	415	2	22	424	205	220	0	94	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	415	2	22	424	205	220	0	94	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	95	415	2	22	424	205	220	0	94	6	0	19
Adjusted Volume Module:												
Grade:		0%			0%			0%			0%	
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	105	415	2	24	424	205	242	0	103	7	0	21
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	629	xxxx	xxxxx	417	xxxx	xxxxx	1059	xxxx	315	957	xxxx	209
Potent Cap.:	788	xxxx	xxxxx	1024	xxxx	xxxxx	223	xxxx	959	259	xxxx	1086
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.87	xxxx	1.00	0.79	xxxx	1.00
Move Cap.:	788	xxxx	xxxxx	1024	xxxx	xxxxx	193	xxxx	959	204	xxxx	1086
Level Of Service Module:												
Stopped Del:	5.2	xxxx	xxxxx	3.6	xxxx	xxxxx	378.3	xxxx	4.2	18.2	xxxx	3.4
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	254	xxxxx	xxxx	532	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	266	xxxxx	xxxxx	6.9	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	B	*
ApproachDel:		1.0			0.1			266.3			6.9	

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
CumIPM

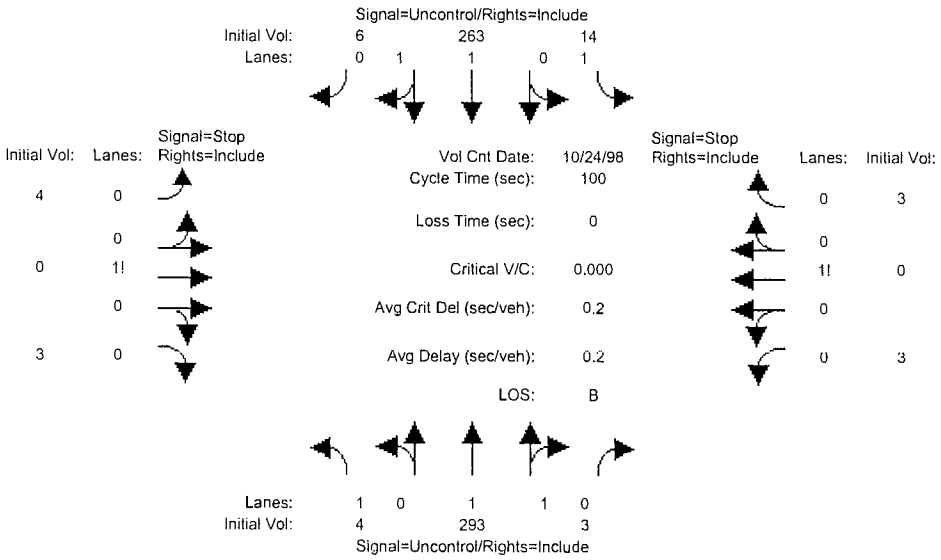
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	83	0	0	0	0	193	193	0	83	0	0	0
App+Pending:	17	106	1	15	83	1	2	0	0	4	0	8
Initial Fut:	109	468	2	22	473	205	220	0	94	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	468	2	22	473	205	220	0	94	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	109	468	2	22	473	205	220	0	94	6	0	19
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	120	468	2	24	473	205	242	0	103	7	0	21
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	678	xxxx	xxxxx	470	xxxx	xxxxx	1175	xxxx	339	1073	xxxx	235
Potent Cap.:	741	xxxx	xxxxx	959	xxxx	xxxxx	188	xxxx	932	218	xxxx	1053
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.84	xxxx	1.00	0.76	xxxx	1.00
Move Cap.:	741	xxxx	xxxxx	959	xxxx	xxxxx	158	xxxx	932	167	xxxx	1053
Level Of Service Module:												
Stopped Del:	5.7	xxxx	xxxxx	3.8	xxxx	xxxxx	798.3	xxxx	4.3	22.4	xxxx	3.5
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	211	xxxxx	xxxx	463	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	561	xxxxx	xxxxx	8.0	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	B	*
ApproachDel:	1.2			0.1			560.6			8.0		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
ExistSat

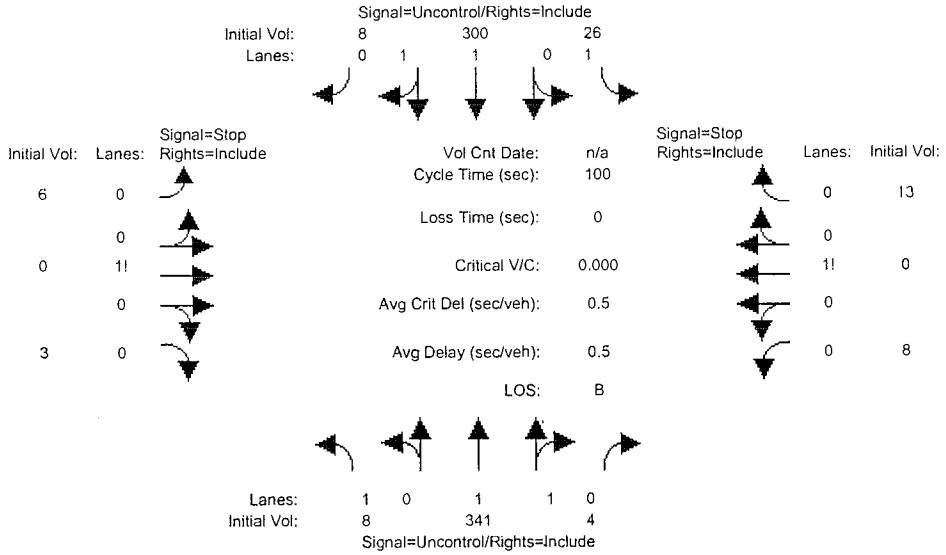
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 24 Oct 1998 << Sat Peak												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Addcd Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	293	3	14	263	6	4	0	3	3	0	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	4	293	3	14	263	6	4	0	3	3	0	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	4	293	3	14	263	6	4	0	3	3	0	3
Adjusted Volume Module:												
Grade:		0%			0%			0%			0%	
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	4	293	3	15	263	6	4	0	3	3	0	3
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	269	xxxx	xxxxx	296	xxxx	xxxxx	577	xxxx	135	576	xxxx	148
Potent Cap.:	1229	xxxx	xxxxx	1189	xxxx	xxxxx	453	xxxx	1184	454	xxxx	1165
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.98	xxxx	1.00	0.98	xxxx	1.00
Move Cap.:	1229	xxxx	xxxxx	1189	xxxx	xxxxx	446	xxxx	1184	447	xxxx	1165
Level Of Service Module:												
Stopped Del:	2.9	xxxx	xxxxx	3.1	xxxx	xxxxx	8.1	xxxx	3.0	8.1	xxxx	3.1
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	608	xxxxx	xxxx	646	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	6.0	xxxxx	xxxxx	5.6	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	B	*
ApproachDel:		0.0			0.2			6.0			5.6	

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
BackSat

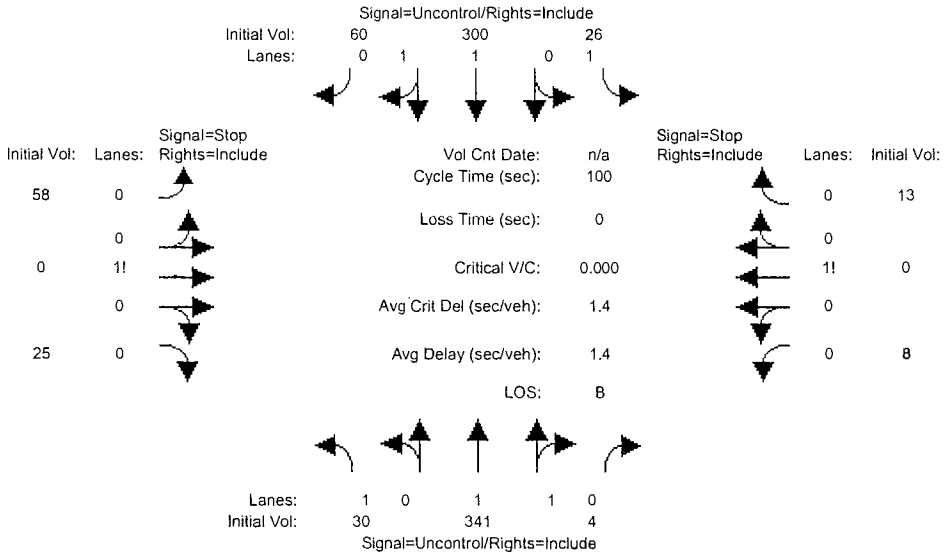
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ApprovedDev:	4	48	1	12	37	2	2	0	0	5	0	10
Initial Fut:	8	341	4	26	300	8	6	0	3	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	341	4	26	300	8	6	0	3	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	8	341	4	26	300	8	6	0	3	8	0	13
Adjusted Volume Module:												
Grade:		0%			0%			0%			0%	
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	9	341	4	29	300	8	7	0	3	9	0	14
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	308	xxxx	xxxxx	345	xxxx	xxxxx	679	xxxx	154	677	xxxx	173
Potent Cap.:	1171	xxxx	xxxxx	1119	xxxx	xxxxx	390	xxxx	1157	391	xxxx	1132
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.96	xxxx	1.00	0.97	xxxx	1.00
Move Cap.:	1171	xxxx	xxxxx	1119	xxxx	xxxxx	375	xxxx	1157	380	xxxx	1132
Level Of Service Module:												
Stopped Del:	3.1	xxxx	xxxxx	3.3	xxxx	xxxxx	9.8	xxxx	3.1	9.7	xxxx	3.2
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	484	xxxxx	xxxx	645	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	7.5	xxxxx	xxxxx	5.7	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	B	*
ApproachDel:		0.1			0.3			7.5			5.7	

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph2Sat

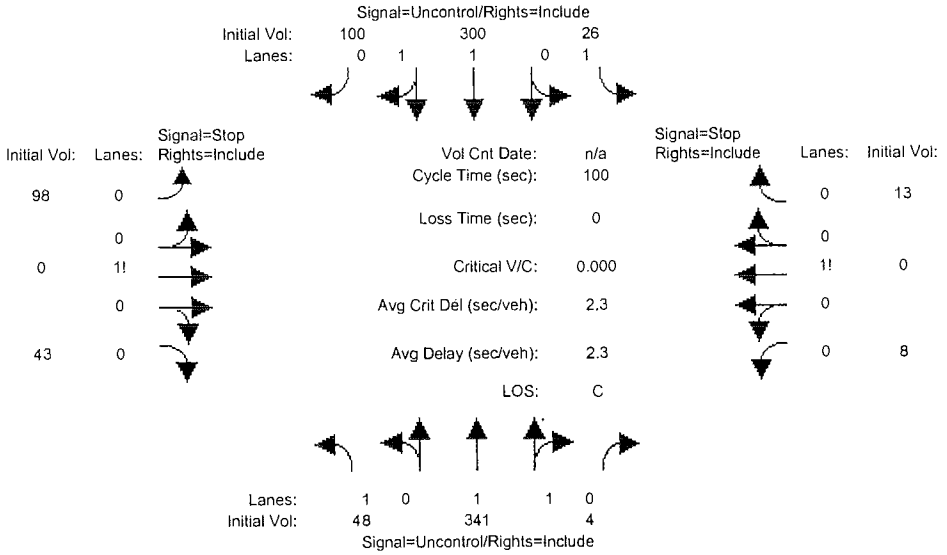
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	22	0	0	0	0	52	52	0	22	0	0	0
ApprovedDev:	4	48	1	12	37	2	2	0	0	5	0	10
Initial Fut:	30	341	4	26	300	60	58	0	25	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	341	4	26	300	60	58	0	25	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	30	341	4	26	300	60	58	0	25	8	0	13
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	33	341	4	29	300	60	64	0	28	9	0	14
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	360	xxxx	xxxxx	345	xxxx	xxxxx	727	xxxx	180	699	xxxx	173
Potent Cap.:	1099	xxxx	xxxxx	1119	xxxx	xxxxx	363	xxxx	1122	378	xxxx	1132
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.95	xxxx	1.00	0.93	xxxx	1.00
Move Cap.:	1099	xxxx	xxxxx	1119	xxxx	xxxxx	343	xxxx	1122	354	xxxx	1132
Level Of Service Module:												
Stopped Del:	3.4	xxxx	xxxxx	3.3	xxxx	xxxxx	12.6	xxxx	3.3	10.4	xxxx	3.2
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	434	xxxxx	xxxx	616	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	9.8	xxxxx	xxxxx	6.0	xxxxx
Shared LOS:	*	*	*	*	*	*	*	B	*	*	B	*
ApproachDel:		0.3			0.2			9.8			6.0	

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph3Sat

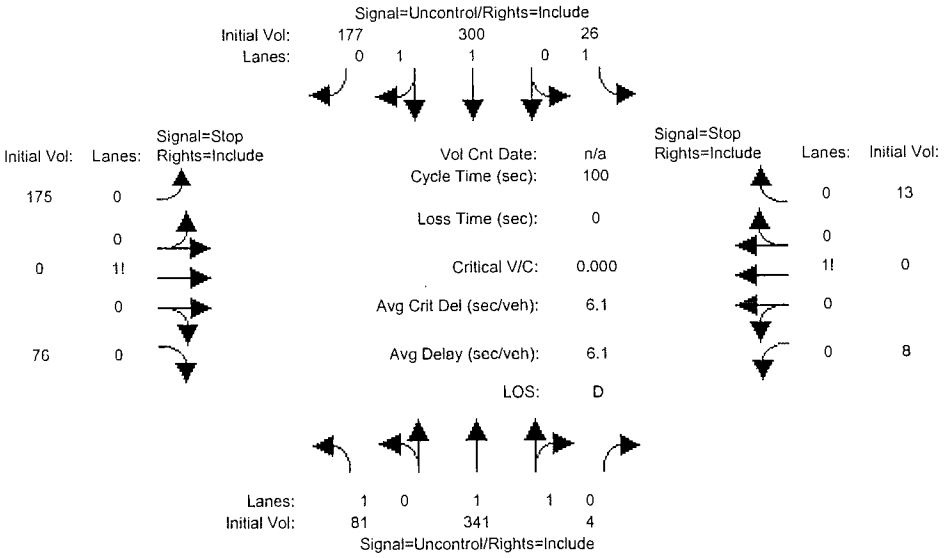
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	40	0	0	0	0	92	92	0	40	0	0	0
ApprovedDev:	4	48	1	12	37	2	2	0	0	5	0	10
Initial Fut:	48	341	4	26	300	100	98	0	43	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	48	341	4	26	300	100	98	0	43	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	48	341	4	26	300	100	98	0	43	8	0	13
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	53	341	4	29	300	100	108	0	47	9	0	14
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	400	xxxx	xxxxx	345	xxxx	xxxxx	765	xxxx	200	717	xxxx	173
Potent Cap.:	1046	xxxx	xxxxx	1119	xxxx	xxxxx	343	xxxx	1096	368	xxxx	1132
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.93	xxxx	1.00	0.90	xxxx	1.00
Move Cap.:	1046	xxxx	xxxxx	1119	xxxx	xxxxx	320	xxxx	1096	332	xxxx	1132
Level Of Service Module:												
Stopped Del:	3.6	xxxx	xxxxx	3.3	xxxx	xxxxx	16.2	xxxx	3.4	11.1	xxxx	3.2
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	408	xxxxx	xxxx	591	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.3	xxxxx	xxxxx	6.2	xxxxx
Shared LOS:	*	*	*	*	*	*	*	C	*	*	B	*
ApproachDel:	0.5			0.2			12.3			6.2		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph4Sat

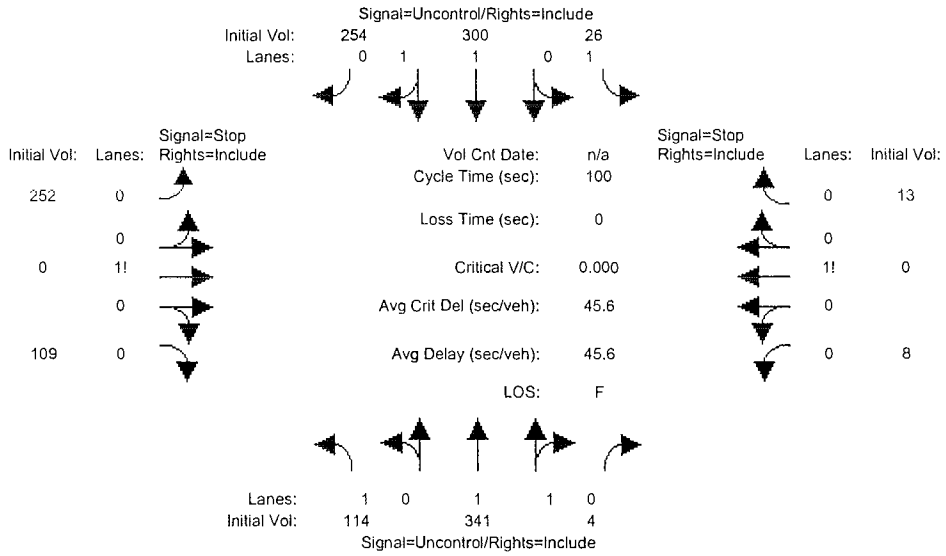
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	73	0	0	0	0	169	169	0	73	0	0	0
ApprovedDev:	4	48	1	12	37	2	2	0	0	5	0	10
Initial Fut:	81	341	4	26	300	177	175	0	76	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	81	341	4	26	300	177	175	0	76	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	81	341	4	26	300	177	175	0	76	8	0	13
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	89	341	4	29	300	177	193	0	84	9	0	14
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	477	xxxx	xxxxx	345	xxxx	xxxxx	837	xxxx	239	750	xxxx	173
Potent Cap.:	951	xxxx	xxxxx	1119	xxxx	xxxxx	309	xxxx	1048	351	xxxx	1132
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.90	xxxx	1.00	0.84	xxxx	1.00
Move Cap.:	951	xxxx	xxxxx	1119	xxxx	xxxxx	278	xxxx	1048	294	xxxx	1132
Level Of Service Module:												
Stopped Del:	4.1	xxxx	xxxxx	3.3	xxxx	xxxxx	34.3	xxxx	3.7	12.6	xxxx	3.2
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	357	xxxxx	xxxx	543	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	25.1	xxxxx	xxxxx	6.8	xxxxx
Shared LOS:	*	*	*	*	*	*	*	D	*	*	B	*
ApproachDel:	0.8			0.2			25.1			6.8		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph5Sat

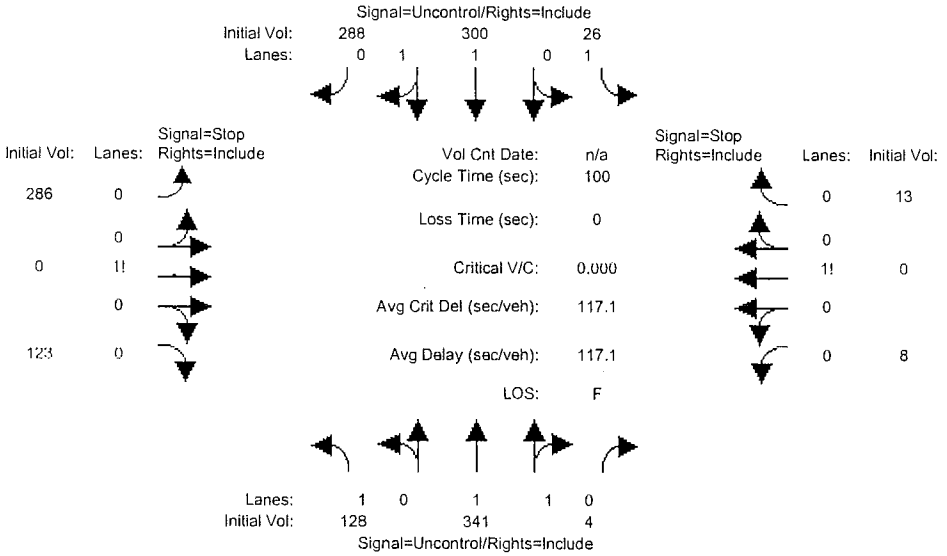
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	106	0	0	0	0	246	246	0	106	0	0	0
ApprovedDev:	4	48	1	12	37	2	2	0	0	5	0	10
Initial Fut:	114	341	4	26	300	254	252	0	109	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	341	4	26	300	254	252	0	109	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	114	341	4	26	300	254	252	0	109	8	0	13
Adjusted Volume Module:												
Grade:		0%			0%			0%			0%	
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	125	341	4	29	300	254	277	0	120	9	0	14
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	554	xxxx	xxxxx	345	xxxx	xxxxx	908	xxxx	277	783	xxxx	173
Potent Cap.:	864	xxxx	xxxxx	1119	xxxx	xxxxx	278	xxxx	1002	334	xxxx	1132
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.86	xxxx	1.00	0.77	xxxx	1.00
Move Cap.:	864	xxxx	xxxxx	1119	xxxx	xxxxx	239	xxxx	1002	257	xxxx	1132
Level Of Service Module:												
Stopped Del:	4.8	xxxx	xxxxx	3.3	xxxx	xxxxx	237.6	xxxx	4.0	14.5	xxxx	3.2
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	311	xxxxx	xxxx	492	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	167	xxxxx	xxxxx	7.5	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	B	*
ApproachDel:		1.3			0.2			167.1			7.5	

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
Ph6Sat

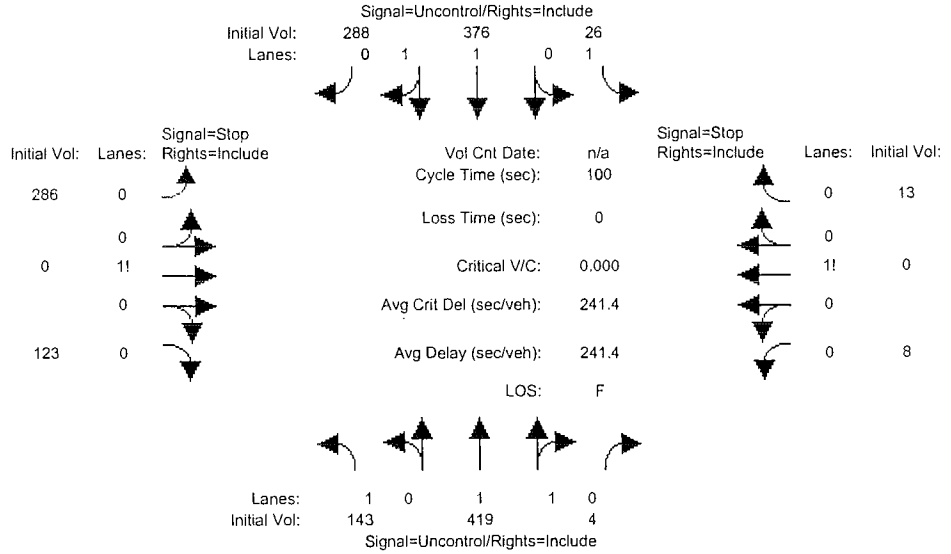
Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	120	0	0	0	0	280	280	0	120	0	0	0
ApprovedDev:	4	48	1	12	37	2	2	0	0	5	0	10
Initial Fut:	128	341	4	26	300	288	286	0	123	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	341	4	26	300	288	286	0	123	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	128	341	4	26	300	288	286	0	123	8	0	13
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	141	341	4	29	300	288	315	0	135	9	0	14
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	588	xxxx	xxxxx	345	xxxx	xxxxx	939	xxxx	294	797	xxxx	173
Potent Cap.:	829	xxxx	xxxxx	1119	xxxx	xxxxx	266	xxxx	983	328	xxxx	1132
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.84	xxxx	1.00	0.74	xxxx	1.00
Move Cap.:	829	xxxx	xxxxx	1119	xxxx	xxxxx	224	xxxx	983	241	xxxx	1132
Level Of Service Module:												
Stopped Del:	5.1	xxxx	xxxxx	3.3	xxxx	xxxxx	581.6	xxxx	4.2	15.5	xxxx	3.2
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	292	xxxxx	xxxx	470	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	408	xxxxx	xxxxx	7.9	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	B	*
ApproachDel:	1.5			0.2			407.9			7.9		

Level Of Service Computation Report
1994 HCM Unsignalized (Future Volume Alternative)
CumSat

Intersection #3: Monterey/Farmn Frontage



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	120	0	0	0	0	280	280	0	120	0	0	0
App+Pending:	19	126	1	12	113	2	2	0	0	5	0	10
Initial Fut:	143	419	4	26	376	288	286	0	123	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	419	4	26	376	288	286	0	123	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	143	419	4	26	376	288	286	0	123	8	0	13
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	157	419	4	29	376	288	315	0	135	9	0	14
Critical Gap Module:												
MoveUp Time:	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx	3.4	xxxx	2.6	3.4	xxxx	2.6
Critical Gp:	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx	7.0	xxxx	5.5	7.0	xxxx	5.5
Capacity Module:												
Cnflict Vol:	664	xxxx	xxxxx	423	xxxx	xxxxx	1108	xxxx	332	966	xxxx	212
Potent Cap.:	754	xxxx	xxxxx	1016	xxxx	xxxxx	207	xxxx	940	255	xxxx	1082
Adj Cap:	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx	0.81	xxxx	1.00	0.70	xxxx	1.00
Move Cap.:	754	xxxx	xxxxx	1016	xxxx	xxxxx	168	xxxx	940	180	xxxx	1082
Level Of Service Module:												
Stopped Del:	5.9	xxxx	xxxxx	3.6	xxxx	xxxxx	1334	xxxx	4.4	21.0	xxxx	3.4
LOS by Move:	B	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	223	xxxxx	xxxx	372	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	934	xxxxx	xxxxx	10.1	xxxxx
Shared LOS:	*	*	*	*	*	*	*	F	*	*	C	*
ApproachDel:	1.6			0.2			934.1			10.1		

Level Of Service Computation Report
1985 HCM Operations Method (Future Volume Alternative)

Intersection #23 Monterey/Farmn Frontage

Cycle (sec):	90	Critical Vol./Cap. (X):	0.350
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	14.4
Optimal Cycle:	39	Level Of Service:	B-

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1 1	0	1 0	1 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	50	0	0	0	0	118	118	0	50	0	0	0
ApprovedDev:	3	53	1	15	34	1	2	0	0	4	0	8
Initial Fut:	62	415	2	22	424	130	145	0	61	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	62	415	2	22	424	130	145	0	61	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	415	2	22	424	130	145	0	61	6	0	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	62	415	2	22	424	130	145	0	61	6	0	19
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.04	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Lanes:	1.00	1.99	0.01	1.00	1.52	0.48	0.70	0.00	0.30	0.24	0.00	0.76
Final Sat.:	1750	3682	18	1750	2831	868	1232	0	518	420	0	1330
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.01	0.15	0.15	0.12	0.00	0.12	0.01	0.00	0.01
Crit Moves:	****				****		****					
Green Time:	9.1	40.7	40.7	7.0	38.6	38.6	30.3	0.0	30.3	30.3	0.0	30.3
Volume/Cap:	0.35	0.25	0.25	0.16	0.35	0.35	0.35	0.00	0.35	0.04	0.00	0.04
Level Of Service Module:												
Delay/Veh:	29.1	11.6	11.6	29.5	13.2	13.2	17.2	0.0	17.2	15.3	0.0	15.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.1	11.6	11.6	29.5	13.2	13.2	17.2	0.0	17.2	15.3	0.0	15.3
DesignQueue:	3	12	0	1	13	4	5	0	2	0	0	1

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Level Of Service Computation Report
1985 HCM Operations Method (Future Volume Alternative)

Intersection #13 Monterey/Farmn Frontage

Cycle (sec): 90 Critical Vol./Cap. (X): 0.434
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 16.2
Optimal Cycle: 39 Level Of Service: C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	74	0	0	0	0	172	172	0	74	0	0	0
ApprovedDev:	3	53	1	15	34	1	2	0	0	4	0	8
Initial Fut:	86	415	2	22	424	184	199	0	85	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	86	415	2	22	424	184	199	0	85	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	415	2	22	424	184	199	0	85	6	0	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	86	415	2	22	424	184	199	0	85	6	0	19
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.04	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Lanes:	1.00	1.99	0.01	1.00	1.38	0.62	0.70	0.00	0.30	0.24	0.00	0.76
Final Sat.:	1750	3682	18	1750	2579	1119	1226	0	524	420	0	1330
Capacity Analysis Module:												
Vol/Sat:	0.05	0.11	0.11	0.01	0.16	0.16	0.16	0.00	0.16	0.01	0.00	0.01
Crit Moves:	****				****		****					
Green Time:	10.2	37.3	37.3	7.0	34.1	34.1	33.7	0.0	33.7	33.7	0.0	33.7
Volume/Cap:	0.43	0.27	0.27	0.16	0.43	0.43	0.43	0.00	0.43	0.04	0.00	0.04
Level Of Service Module:												
Delay/Veh:	29.3	13.2	13.2	29.5	15.9	15.9	16.3	0.0	16.3	13.6	0.0	13.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.3	13.2	13.2	29.5	15.9	15.9	16.3	0.0	16.3	13.6	0.0	13.6
DesignQueue:	4	13	0	1	14	6	6	0	3	0	0	1

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Level Of Service Computation Report
1985 HCM Operations Method (Future Volume Alternative)

Intersection #13 Monterey/Farmn Frontage

Cycle (sec):	90	Critical Vol./Cap. (X):	0.466
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	16.7
Optimal Cycle:	39	Level Of Service:	C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	83	0	0	0	0	193	193	0	83	0	0	0
ApprovedDev:	3	53	1	15	34	1	2	0	0	4	0	8
Initial Fut:	95	415	2	22	424	205	220	0	94	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	415	2	22	424	205	220	0	94	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	415	2	22	424	205	220	0	94	6	0	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	95	415	2	22	424	205	220	0	94	6	0	19
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.04	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Lanes:	1.00	1.99	0.01	1.00	1.33	0.67	0.70	0.00	0.30	0.24	0.00	0.76
Final Sat.:	1750	3682	18	1750	2493	1205	1226	0	524	420	0	1330
Capacity Analysis Module:												
Vol/Sat:	0.05	0.11	0.11	0.01	0.17	0.17	0.18	0.00	0.18	0.01	0.00	0.01
Crit Moves:	****				****		****					
Green Time:	10.5	36.3	36.3	7.0	32.9	32.9	34.7	0.0	34.7	34.7	0.0	34.7
Volume/Cap:	0.47	0.28	0.28	0.16	0.47	0.47	0.47	0.00	0.47	0.04	0.00	0.04
Level Of Service Module:												
Delay/Veh:	29.5	13.7	13.7	29.5	16.8	16.8	16.1	0.0	16.1	13.1	0.0	13.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.5	13.7	13.7	29.5	16.8	16.8	16.1	0.0	16.1	13.1	0.0	13.1
DesignQueue:	4	13	0	1	14	7	7	0	3	0	0	1

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Level Of Service Computation Report
1985 HCM Operations Method (Future Volume Alternative)

Intersection #33 Monterey/Farmn Frontage

Cycle (sec): 90 Critical Vol./Cap. (X): 0.490
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 16.7
Optimal Cycle: 40 Level Of Service: C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1 1	0	1 0	1 1	0	0 0	1! 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	83	0	0	0	0	193	193	0	83	0	0	0
App+Pending:	17	106	1	15	83	1	2	0	0	4	0	8
Initial Fut:	109	468	2	22	473	205	220	0	94	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	468	2	22	473	205	220	0	94	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	468	2	22	473	205	220	0	94	6	0	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	109	468	2	22	473	205	220	0	94	6	0	19
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.04	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Lanes:	1.00	1.99	0.01	1.00	1.38	0.62	0.70	0.00	0.30	0.24	0.00	0.76
Final Sat.:	1750	3684	16	1750	2580	1118	1226	0	524	420	0	1330
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.13	0.01	0.18	0.18	0.18	0.00	0.18	0.01	0.00	0.01
Crit Moves:	****				****		****					
Green Time:	11.4	38.1	38.1	7.0	33.6	33.6	32.9	0.0	32.9	32.9	0.0	32.9
Volume/Cap:	0.49	0.30	0.30	0.16	0.49	0.49	0.49	0.00	0.49	0.04	0.00	0.04
Level Of Service Module:												
Delay/Veh:	29.2	13.1	13.1	29.5	16.7	16.7	17.3	0.0	17.3	14.0	0.0	14.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.2	13.1	13.1	29.5	16.7	16.7	17.3	0.0	17.3	14.0	0.0	14.0
DesignQueue:	5	14	0	1	16	7	7	0	3	0	0	1

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Level Of Service Computation Report
1985 HCM Operations Method (Future Volume Alternative)

Intersection #23 Monterey/Farmn Frontage

Cycle (sec):	90	Critical Vol./Cap. (X):	0.368
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	18.0
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	73	0	0	0	0	169	169	0	73	0	0	0
ApprovedDev:	4	48	1	12	37	2	2	0	0	5	0	10
Initial Fut:	81	341	4	26	300	177	175	0	76	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	81	341	4	26	300	177	175	0	76	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	341	4	26	300	177	175	0	76	8	0	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	81	341	4	26	300	177	175	0	76	8	0	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.04	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Lanes:	1.00	1.98	0.02	1.00	1.24	0.76	0.70	0.00	0.30	0.38	0.00	0.62
Final Sat.:	1750	3657	43	1750	2326	1372	1220	0	530	667	0	1083
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.09	0.01	0.13	0.13	0.14	0.00	0.14	0.01	0.00	0.01
Crit Moves:	****				****		****					
Green Time:	11.3	25.2	25.2	17.7	31.6	31.6	35.1	0.0	35.1	35.1	0.0	35.1
Volume/Cap:	0.37	0.33	0.33	0.08	0.37	0.37	0.37	0.00	0.37	0.03	0.00	0.03
Level Of Service Module:												
Delay/Veh:	27.9	19.6	19.6	22.4	16.6	16.6	15.0	0.0	15.0	12.9	0.0	12.9
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.9	19.6	19.6	22.4	16.6	16.6	15.0	0.0	15.0	12.9	0.0	12.9
DesignQueue:	4	13	0	1	10	6	6	0	2	0	0	0

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Intersection #3 Monterey/Farmn Frontage

Cycle (sec):	90	Critical Vol./Cap. (X):	0.486
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	19.3
Optimal Cycle:	39	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	106	0	0	0	0	246	246	0	106	0	0	0
ApprovedDev:	4	48	1	12	37	2	2	0	0	5	0	10
Initial Fut:	114	341	4	26	300	254	252	0	109	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	341	4	26	300	254	252	0	109	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	341	4	26	300	254	252	0	109	8	0	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	114	341	4	26	300	254	252	0	109	8	0	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.05	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Lanes:	1.00	1.98	0.02	1.00	1.06	0.94	0.70	0.00	0.30	0.38	0.00	0.62
Final Sat.:	1750	3657	43	1750	2002	1695	1222	0	528	667	0	1083
Capacity Analysis Module:												
Vol/Sat:	0.07	0.09	0.09	0.01	0.15	0.15	0.21	0.00	0.21	0.01	0.00	0.01
Crit Moves:	****				****		****					
Green Time:	12.1	23.4	23.4	16.4	27.7	27.7	38.2	0.0	38.2	38.2	0.0	38.2
Volume/Cap:	0.49	0.36	0.36	0.08	0.49	0.49	0.49	0.00	0.49	0.03	0.00	0.03
Level Of Service Module:												
Delay/Veh:	28.7	20.7	20.7	23.2	19.5	19.5	14.7	0.0	14.7	11.5	0.0	11.5
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.7	20.7	20.7	23.2	19.5	19.5	14.7	0.0	14.7	11.5	0.0	11.5
DesignQueue:	5	13	0	1	11	9	8	0	3	0	0	0

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Intersection #13 Monterey/Farmn Frontage

Cycle (sec):	90	Critical Vol./Cap. (X):	0.536
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	19.9
Optimal Cycle:	43	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	120	0	0	0	0	280	280	0	120	0	0	0
ApprovedDev:	4	48	1	12	37	2	2	0	0	5	0	10
Initial Fut:	128	341	4	26	300	288	286	0	123	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	341	4	26	300	288	286	0	123	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	341	4	26	300	288	286	0	123	8	0	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	128	341	4	26	300	288	286	0	123	8	0	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.05	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Lanes:	1.00	1.98	0.02	1.00	1.00	1.00	0.70	0.00	0.30	0.38	0.00	0.62
Final Sat.:	1750	3657	43	1750	1898	1800	1224	0	526	667	0	1083
Capacity Analysis Module:												
Vol/Sat:	0.07	0.09	0.09	0.01	0.16	0.16	0.23	0.00	0.23	0.01	0.00	0.01
Crit Moves:	****				****		****					
Green Time:	12.3	22.8	22.8	16.0	26.5	26.5	39.2	0.0	39.2	39.2	0.0	39.2
Volume/Cap:	0.54	0.37	0.37	0.08	0.54	0.54	0.54	0.00	0.54	0.03	0.00	0.03
Level Of Service Module:												
Delay/Veh:	29.4	21.1	21.1	23.5	20.6	20.7	14.8	0.0	14.8	11.0	0.0	11.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.4	21.1	21.1	23.5	20.6	20.7	14.8	0.0	14.8	11.0	0.0	11.0
DesignQueue:	6	13	0	1	11	11	9	0	4	0	0	0

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Intersection #3 Monterey/Farmn Frontage

Cycle (sec):	90	Critical Vol./Cap. (X):	0.571
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	18.8
Optimal Cycle:	45	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1	1 0	1 0	1	1 0	0 0	1!	0 0	0 0	1!	0 0
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	120	0	0	0	0	280	280	0	120	0	0	0
App+Pending:	19	126	1	12	113	2	2	0	0	5	0	10
Initial Fut:	143	419	4	26	376	288	286	0	123	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	419	4	26	376	288	286	0	123	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	419	4	26	376	288	286	0	123	8	0	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	143	419	4	26	376	288	286	0	123	8	0	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.05	1.00	0.97	0.97	0.97	0.97	0.97	0.97
Lanes:	1.00	1.98	0.02	1.00	1.11	0.89	0.70	0.00	0.30	0.38	0.00	0.62
Final Sat.:	1750	3665	35	1750	2094	1604	1224	0	526	667	0	1083
Capacity Analysis Module:												
Vol/Sat:	0.08	0.11	0.11	0.01	0.18	0.18	0.23	0.00	0.23	0.01	0.00	0.01
Crit Moves:	****				****		****					
Green Time:	12.9	34.2	34.2	7.0	28.3	28.3	36.8	0.0	36.8	36.8	0.0	36.8
Volume/Cap:	0.57	0.30	0.30	0.19	0.57	0.57	0.57	0.00	0.57	0.03	0.00	0.03
Level Of Service Module:												
Delay/Veh:	29.6	14.9	14.9	29.6	20.1	20.1	16.4	0.0	16.4	12.1	0.0	12.1
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.6	14.9	14.9	29.6	20.1	20.1	16.4	0.0	16.4	12.1	0.0	12.1
DesignQueue:	6	13	0	1	14	10	9	0	4	0	0	0

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Intersection #13 Monterey/Farmn Frontage

Cycle (sec):	90	Critical Vol./Cap. (X):	0.326
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	15.6
Optimal Cycle:	49	Level Of Service:	C+

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	0 0	1!	0 0
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	50	0	0	0	0	118	118	0	50	0	0	0
ApprovedDev:	3	53	1	15	34	1	2	0	0	4	0	8
Initial Fut:	62	415	2	22	424	130	145	0	61	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	62	415	2	22	424	130	145	0	61	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	415	2	22	424	130	145	0	61	6	0	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	62	415	2	22	424	130	145	0	61	6	0	19
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.04	1.00	0.97	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	1.99	0.01	1.00	1.52	0.48	1.00	0.00	1.00	0.24	0.00	0.76
Final Sat.:	1750	3682	18	1750	2831	868	1750	0	1800	420	0	1330
Capacity Analysis Module:												
Vol/Sat:	0.04	0.11	0.11	0.01	0.15	0.15	0.08	0.00	0.03	0.01	0.00	0.01
Crit Moves:	****				****		****			****		
Green Time:	9.0	40.0	40.0	7.0	38.0	38.0	21.0	0.0	21.0	10.0	0.0	10.0
Volume/Cap:	0.35	0.25	0.25	0.16	0.35	0.35	0.35	0.00	0.15	0.13	0.00	0.13
Level Of Service Module:												
Delay/Veh:	29.3	11.9	11.9	29.5	13.5	13.5	22.1	0.0	20.8	27.4	0.0	27.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.3	11.9	11.9	29.5	13.5	13.5	22.1	0.0	20.8	27.4	0.0	27.4
DesignQueue:	3	12	0	1	13	4	6	0	2	0	0	1

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Intersection #43 Monterey/Farmn Frontage

Cycle (sec): 90 Critical Vol./Cap. (X): 0.394
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 17.3
Optimal Cycle: 49 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	0 0	1!	0 0
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	74	0	0	0	0	172	172	0	74	0	0	0
ApprovedDev:	3	53	1	15	34	1	2	0	0	4	0	8
Initial Fut:	86	415	2	22	424	184	199	0	85	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	86	415	2	22	424	184	199	0	85	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	86	415	2	22	424	184	199	0	85	6	0	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	86	415	2	22	424	184	199	0	85	6	0	19
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.04	1.00	0.97	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	1.99	0.01	1.00	1.38	0.62	1.00	0.00	1.00	0.24	0.00	0.76
Final Sat.:	1750	3682	18	1750	2579	1119	1750	0	1800	420	0	1330
Capacity Analysis Module:												
Vol/Sat:	0.05	0.11	0.11	0.01	0.16	0.16	0.11	0.00	0.05	0.01	0.00	0.01
Crit Moves:	****				****		****			****		
Green Time:	10.2	37.4	37.4	7.0	34.2	34.2	23.6	0.0	23.6	10.0	0.0	10.0
Volume/Cap:	0.43	0.27	0.27	0.16	0.43	0.43	0.43	0.00	0.18	0.13	0.00	0.13
Level Of Service Module:												
Delay/Veh:	29.2	13.2	13.2	29.5	15.9	15.9	21.4	0.0	19.5	27.4	0.0	27.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.2	13.2	13.2	29.5	15.9	15.9	21.4	0.0	19.5	27.4	0.0	27.4
DesignQueue:	4	12	0	1	14	6	8	0	3	0	0	1

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Intersection #3 Monterey/Farmn Frontage

Cycle (sec):	90	Critical Vol./Cap. (X):	0.420
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	17.8
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0	1 0	0 0	1!	0 0
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	83	0	0	0	0	193	193	0	83	0	0	0
ApprovedDev:	3	53	1	15	34	1	2	0	0	4	0	8
Initial Fut:	95	415	2	22	424	205	220	0	94	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	415	2	22	424	205	220	0	94	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	415	2	22	424	205	220	0	94	6	0	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	95	415	2	22	424	205	220	0	94	6	0	19
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.04	1.00	0.97	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	1.99	0.01	1.00	1.33	0.67	1.00	0.00	1.00	0.24	0.00	0.76
Final Sat.:	1750	3682	18	1750	2493	1205	1750	0	1800	420	0	1330
Capacity Analysis Module:												
Vol/Sat:	0.05	0.11	0.11	0.01	0.17	0.17	0.13	0.00	0.05	0.01	0.00	0.01
Crit Moves:	****				****		****			****		
Green Time:	10.5	36.6	36.6	7.0	33.0	33.0	24.4	0.0	24.4	10.0	0.0	10.0
Volume/Cap:	0.46	0.28	0.28	0.16	0.46	0.46	0.46	0.00	0.19	0.13	0.00	0.13
Level Of Service Module:												
Delay/Veh:	29.4	13.6	13.6	29.5	16.7	16.7	21.3	0.0	19.2	27.4	0.0	27.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.4	13.6	13.6	29.5	16.7	16.7	21.3	0.0	19.2	27.4	0.0	27.4
DesignQueue:	4	13	0	1	14	7	8	0	3	0	0	1

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Intersection #23 Monterey/Farmn Frontage

Cycle (sec):	90	Critical Vol./Cap. (X):	0.445
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	17.8
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	9	362	1	7	390	11	25	0	11	2	0	11
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	9	362	1	7	390	11	25	0	11	2	0	11
Added Vol:	83	0	0	0	0	193	193	0	83	0	0	0
App+Pending:	17	106	1	15	83	1	2	0	0	4	0	8
Initial Fut:	109	468	2	22	473	205	220	0	94	6	0	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	468	2	22	473	205	220	0	94	6	0	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	468	2	22	473	205	220	0	94	6	0	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	109	468	2	22	473	205	220	0	94	6	0	19
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.04	1.00	0.97	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	1.99	0.01	1.00	1.38	0.62	1.00	0.00	1.00	0.24	0.00	0.76
Final Sat.:	1750	3684	16	1750	2580	1118	1750	0	1800	420	0	1330
Capacity Analysis Module:												
Vol/Sat:	0.06	0.13	0.13	0.01	0.18	0.18	0.13	0.00	0.05	0.01	0.00	0.01
Crit Moves:	****				****		****			****		
Green Time:	11.4	38.0	38.0	7.0	33.6	33.6	23.0	0.0	23.0	10.0	0.0	10.0
Volume/Cap:	0.49	0.30	0.30	0.16	0.49	0.49	0.49	0.00	0.20	0.13	0.00	0.13
Level Of Service Module:												
Delay/Veh:	29.2	13.1	13.1	29.5	16.7	16.7	22.4	0.0	20.0	27.4	0.0	27.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.2	13.1	13.1	29.5	16.7	16.7	22.4	0.0	20.0	27.4	0.0	27.4
DesignQueue:	5	14	0	1	16	7	8	0	4	0	0	1

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Intersection #13 Monterey/Farmn Frontage

Cycle (sec):	90	Critical Vol./Cap. (X):	0.331
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	19.1
Optimal Cycle:	49	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	73	0	0	0	0	169	169	0	73	0	0	0
ApprovedDev:	4	48	1	12	37	2	2	0	0	5	0	10
Initial Fut:	81	341	4	26	300	177	175	0	76	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	81	341	4	26	300	177	175	0	76	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	81	341	4	26	300	177	175	0	76	8	0	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	81	341	4	26	300	177	175	0	76	8	0	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.04	1.00	0.97	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	1.98	0.02	1.00	1.24	0.76	1.00	0.00	1.00	0.38	0.00	0.62
Final Sat.:	1750	3657	43	1750	2326	1372	1750	0	1800	667	0	1083
Capacity Analysis Module:												
Vol/Sat:	0.05	0.09	0.09	0.01	0.13	0.13	0.10	0.00	0.04	0.01	0.00	0.01
Crit Moves:	****				****		****			****		
Green Time:	11.4	25.5	25.5	17.8	31.9	31.9	24.7	0.0	24.7	10.0	0.0	10.0
Volume/Cap:	0.36	0.33	0.33	0.08	0.36	0.36	0.36	0.00	0.15	0.11	0.00	0.11
Level Of Service Module:												
Delay/Veh:	27.8	19.5	19.5	22.3	16.5	16.5	20.2	0.0	18.8	27.4	0.0	27.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.8	19.5	19.5	22.3	16.5	16.5	20.2	0.0	18.8	27.4	0.0	27.4
DesignQueue:	4	13	0	1	10	6	7	0	3	0	0	1

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Intersection #13 Monterey/Farmn Frontage

Cycle (sec): 90 Critical Vol./Cap. (X): 0.428
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 20.4
Optimal Cycle: 49 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1	1 0	1 0	1	1 0	1 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	106	0	0	0	0	246	246	0	106	0	0	0
ApprovedDev:	4	48	1	12	37	2	2	0	0	5	0	10
Initial Fut:	114	341	4	26	300	254	252	0	109	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	341	4	26	300	254	252	0	109	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	341	4	26	300	254	252	0	109	8	0	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	114	341	4	26	300	254	252	0	109	8	0	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.05	1.00	0.97	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	1.98	0.02	1.00	1.06	0.94	1.00	0.00	1.00	0.38	0.00	0.62
Final Sat.:	1750	3657	43	1750	2002	1695	1750	0	1800	667	0	1083
Capacity Analysis Module:												
Vol/Sat:	0.07	0.09	0.09	0.01	0.15	0.15	0.14	0.00	0.06	0.01	0.00	0.01
Crit Moves:	****				****		****			****		
Green Time:	12.3	24.0	24.0	16.8	28.4	28.4	27.3	0.0	27.3	10.0	0.0	10.0
Volume/Cap:	0.48	0.35	0.35	0.08	0.48	0.48	0.48	0.00	0.20	0.11	0.00	0.11
Level Of Service Module:												
Delay/Veh:	28.4	20.4	20.4	23.0	19.1	19.1	19.9	0.0	17.7	27.4	0.0	27.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.4	20.4	20.4	23.0	19.1	19.1	19.9	0.0	17.7	27.4	0.0	27.4
DesignQueue:	5	13	0	1	11	9	9	0	4	0	0	1

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Intersection #23 Monterey/Farmn Frontage

Cycle (sec): 90 Critical Vol./Cap. (X): 0.469
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 20.9
Optimal Cycle: 49 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	120	0	0	0	0	280	280	0	120	0	0	0
ApprovedDev:	4	48	1	12	37	2	2	0	0	5	0	10
Initial Fut:	128	341	4	26	300	288	286	0	123	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	341	4	26	300	288	286	0	123	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	341	4	26	300	288	286	0	123	8	0	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	128	341	4	26	300	288	286	0	123	8	0	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.05	1.00	0.97	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	1.98	0.02	1.00	1.00	1.00	1.00	0.00	1.00	0.38	0.00	0.62
Final Sat.:	1750	3657	43	1750	1898	1800	1750	0	1800	667	0	1083
Capacity Analysis Module:												
Vol/Sat:	0.07	0.09	0.09	0.01	0.16	0.16	0.16	0.00	0.07	0.01	0.00	0.01
Crit Moves:	****				****		****			****		
Green Time:	12.6	23.4	23.4	16.4	27.2	27.2	28.2	0.0	28.2	10.0	0.0	10.0
Volume/Cap:	0.52	0.36	0.36	0.08	0.52	0.53	0.52	0.00	0.22	0.11	0.00	0.11
Level Of Service Module:												
Delay/Veh:	28.9	20.7	20.7	23.2	20.1	20.2	20.0	0.0	17.4	27.4	0.0	27.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.9	20.7	20.7	23.2	20.1	20.2	20.0	0.0	17.4	27.4	0.0	27.4
DesignQueue:	6	13	0	1	11	10	10	0	4	0	0	1

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Intersection #13 Monterey/Farmn Frontage

Cycle (sec): 90 Critical Vol./Cap. (X): 0.504
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 19.7
Optimal Cycle: 49 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	10	0	10	10	0	10
Lanes:	1 0	1 1	0	1 0	1 1	0	1 0	0 1	0	0 0	1! 0	0
Volume Module:												
Base Vol:	4	293	3	14	263	6	4	0	3	3	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	293	3	14	263	6	4	0	3	3	0	3
Added Vol:	120	0	0	0	0	280	280	0	120	0	0	0
App+Pending:	19	126	1	12	113	2	2	0	0	5	0	10
Initial Fut:	143	419	4	26	376	288	286	0	123	8	0	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	419	4	26	376	288	286	0	123	8	0	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	419	4	26	376	288	286	0	123	8	0	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	143	419	4	26	376	288	286	0	123	8	0	13
Saturation Flow Module:												
Sat/Lane:	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Adjustment:	0.97	1.03	1.00	0.97	1.05	1.00	0.97	1.00	1.00	0.97	0.97	0.97
Lanes:	1.00	1.98	0.02	1.00	1.11	0.89	1.00	0.00	1.00	0.38	0.00	0.62
Final Sat.:	1750	3665	35	1750	2094	1604	1750	0	1800	667	0	1083
Capacity Analysis Module:												
Vol/Sat:	0.08	0.11	0.11	0.01	0.18	0.18	0.16	0.00	0.07	0.01	0.00	0.01
Crit Moves:	****				****		****			****		
Green Time:	13.1	34.8	34.8	7.0	28.7	28.7	26.2	0.0	26.2	10.0	0.0	10.0
Volume/Cap:	0.56	0.30	0.30	0.19	0.56	0.56	0.56	0.00	0.24	0.11	0.00	0.11
Level Of Service Module:												
Delay/Veh:	29.3	14.5	14.5	29.6	19.8	19.8	21.6	0.0	18.5	27.4	0.0	27.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
ProgAdjFctr:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.3	14.5	14.5	29.6	19.8	19.8	21.6	0.0	18.5	27.4	0.0	27.4
DesignQueue:	6	13	0	1	13	10	11	0	4	0	0	1

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APPENDIX C

TRIP GENERATION ESTIMATES

Gilroy Sports Park
Trip Generation Estimates-by phase

	PM Peak Hour Trips			Saturday Peak Hour Trips		
Phase	In	Out	Total	In	Out	Total
I	0	0	0	0	0	0
II	56	56	112	74	74	148
III	34	34	68	58	58	116
IV	78	78	156	110	110	220
V	78	78	156	110	110	220
VI & VII	29	29	58	48	48	96
VIII & IX	0	0	0	0	0	0
Total	275	275	550	400	400	800

Gilroy Sports Park
Trip Generation Estimates-by phase

Worst Case (Saturday Peak Hour)

Phase I - No Trip Generation

Phase II
Saturday Peak Hour

Colt Baseball

36 players	x	1 fields	=	36 players
36 spectators	x	1 fields	=	36 spectators
				72 people
				2.0 persons/vehicle
				36 vehicles

Little League

30 players	x	2 fields	=	60 players
35 spectators	x	2 fields	=	70 spectators
				130 people
				2.1 persons/vehicle
				62 vehicles

Phase II Total - Assume 75 % of games overlap within peak hour

In	**74 vehicles**
Out	**74 vehicles**
Total	**148 vehicles**

Weekday PM Peak Hour
(75% of Saturday Peak Hour for Games, 50% of other)

Phase II Total

In	**56 vehicles**
Out	**56 vehicles**
Total	**112 vehicles**

Phase III

Saturday Peak Hour

Softball

30 players	x	1 fields	=	30 players
30 spectators	x	1 fields	=	30 spectators
				60 people
				2.0 persons/vehicle
				30 vehicles

Commercial Rec., Special Events

In	35
Out	35
Total	70

Phase III Total - Assume 75 % of games overlap within peak hour

In	**58**
Out	**58**
Total	**116**

Weekday PM Peak Hour

(75% of Saturday Peak Hour for Games, 50% of other)

Phase III Total

In	**34 vehicles**
Out	**34 vehicles**
Total	**68 vehicles**

Phase IV

Saturday Peak Hour

Softball

30 players	x	4 fields	=	120 players
30 spectators	x	4 fields	=	120 spectators
				240 people
				2.0 persons/vehicle
				120 vehicles

Special Events

In	20
Out	20
Total	40

Phase IV Total - Assume 75 % of games overlap within peak hour

In	**110**
Out	**110**
Total	**220**

Weekday PM Peak Hour

(75% of Saturday Peak Hour for Games, 50% of other)

Phase IV Total

In	**78 vehicles**
Out	**78 vehicles**
Total	**156 vehicles**

Phase V

Saturday Peak Hour

Softball

30 players	x	4 fields	=	120	players
30 spectators	x	4 fields	=	120	spectators
				240	people
				2.0	persons/vehicle
				120	vehicles

Special Events

In	20
Out	20
Total	40

Phase V Total - Assume 75 % of games overlap within peak hour

In	**110**
Out	**110**
Total	**220**

Weekday PM Peak Hour

(75% of Saturday Peak Hour for Games, 50% of other)

Phase V Total

In	**78 vehicles**
Out	**78 vehicles**
Total	**156 vehicles**

Phase VI & VII

Saturday Peak Hour

Softball

30 players	x	1 fields	=	30	players
30 spectators	x	1 fields	=	30	spectators
				60	people
				2.0	persons/vehicle
				30	vehicles

General Park Usage

In	25
Out	25
Total	50

Phase VI & VII Total - Assume 75 % of games overlap within peak hour

In	**48**
Out	**48**
Total	**96**

Weekday PM Peak Hour

(75% of Saturday Peak Hour for Games, 50% of other)

Phase VI & VII Total

In	**29 vehicles**
Out	**29 vehicles**
Total	**58 vehicles**

Phases VIII & IX - No Trip Generation

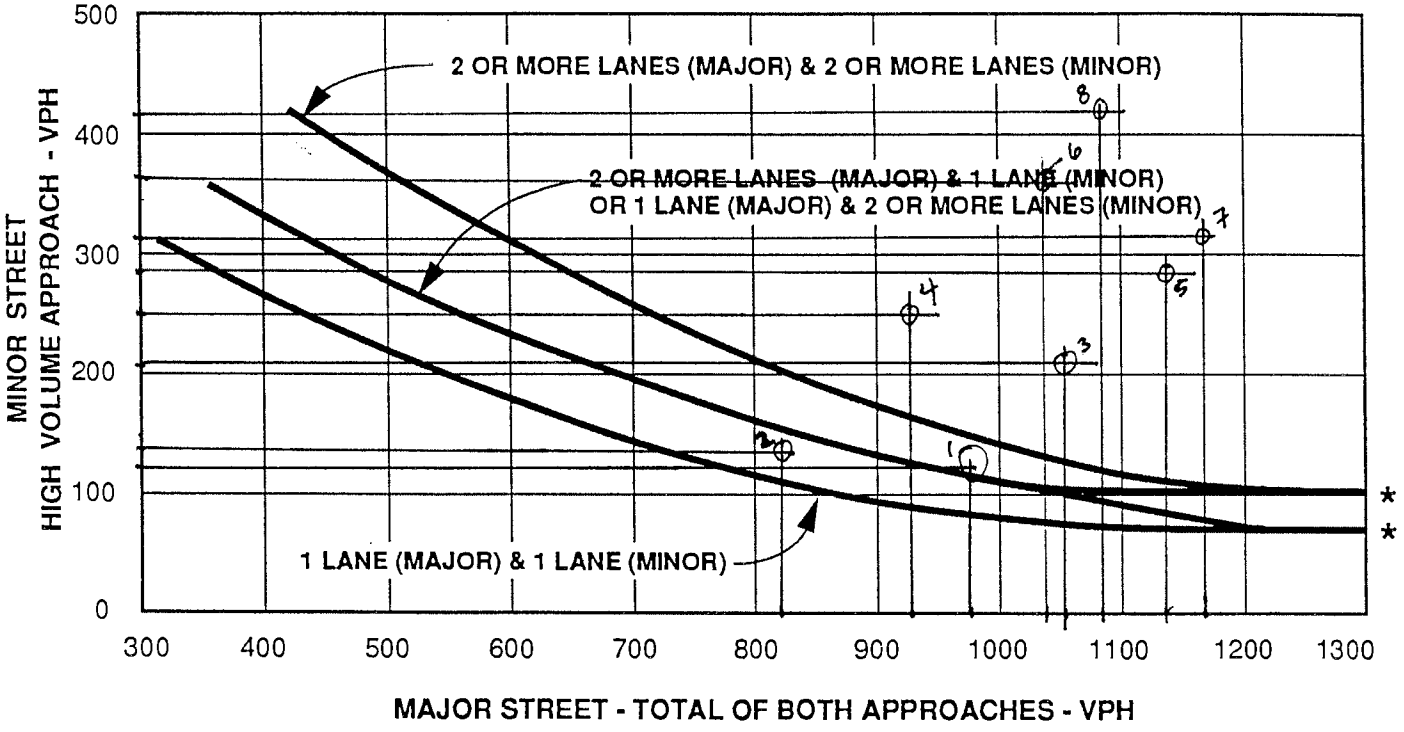
APPENDIX D

SIGNAL WARRANT SHEETS

Figure 9-9
PEAK HOUR VOLUME WARRANT
(Rural Areas)

(Speed ≥ 45 mph)

Monterey St at Farman Frontage Rd



* NOTE:

100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Maj, Min

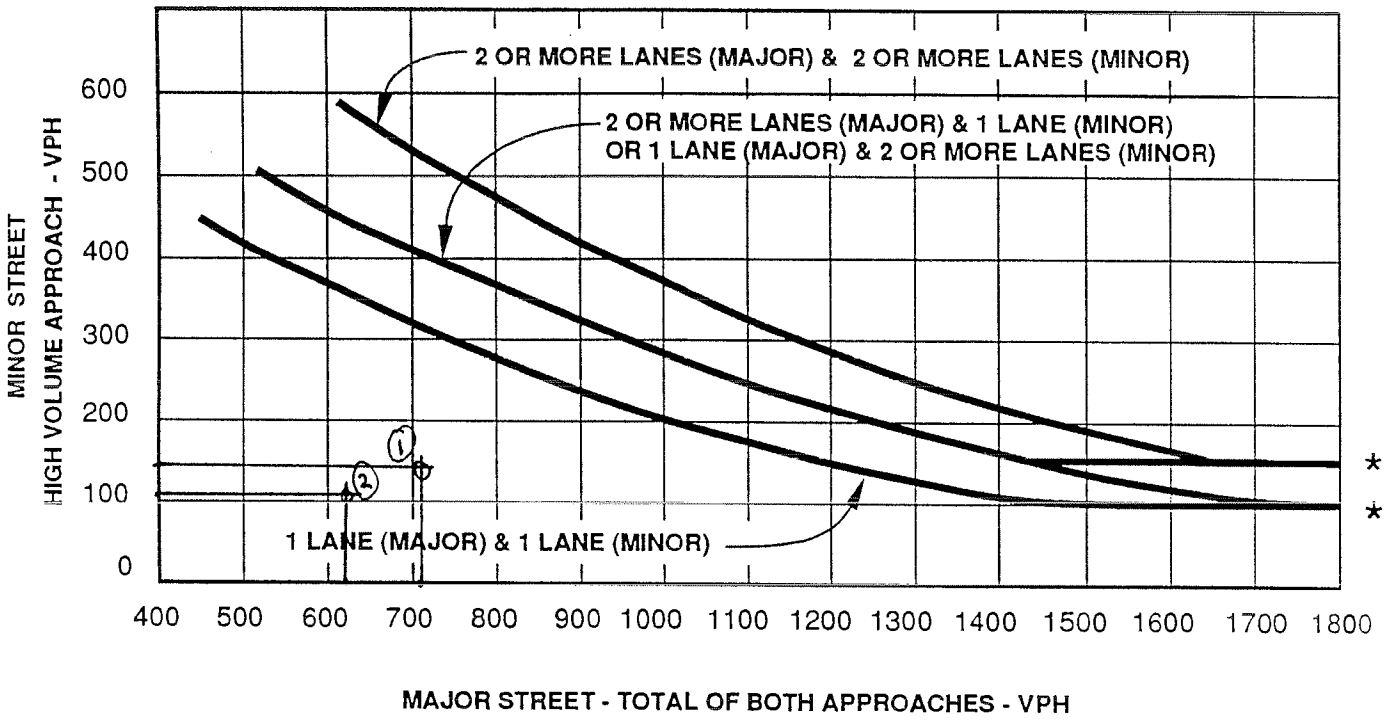
(1) PM Phase 3 977, 128
(3) PM Phase 4 1055, 206
(5) PM Phase 5 1133, 284
(7) PM Phase 6+7 1163, 314 (Buildout)

Maj, Min

(2) Sat Phase 3 819, 141
(4) Sat Phase 4 929, 251
(6) Sat Phase 5 1039, 361
(8) Sat Phase 6+7 1087, 409 (Buildout)

Figure 9-8
PEAK HOUR VOLUME WARRANT
(Urban Areas)

Princevalle & Thomas/Luchessa



* NOTE:

150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

		Maj, Min
①	PM Project Buildout	704, 145
②	Sat Project Buildout	615, 103

APPENDIX E

SITE ACCESS CALCULATIONS
(LOS and QUEUING)

Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

****

Intersection #5 Farman Frnt/Site DW

****

Average Delay (sec/veh): 3.2 Worst Case Level Of Service: B

****

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 0	1	0	1 0	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0	36	0	0	20	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	36	0	0	20	0	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	275	275	0	0	0	0	0
approved:	0	2	0	0	4	0	0	0	0	0	0	0
Initial Fut:	0	38	0	0	24	275	275	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	38	0	0	24	275	275	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	38	0	0	24	275	275	0	0	0	0	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	38	0	0	24	275	303	0	0	0	0	0
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	200	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	812	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	812	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	0.0			0.0			6.7			0.0		

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Level Of Service Computation Report
1994 HCM Unsignalized Method (Future Volume Alternative)

Intersection #5 Farman Frnt/Site DW

Average Delay (sec/veh): 4.8 Worst Case Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	0 0 0	1	0	1 0 0	0	0	0 0 0	0	0
Volume Module:												
Base Vol:	0	7	0	0	10	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	7	0	0	10	0	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	400	400	0	0	0	0	0
approved:	0	2	0	0	6	0	0	0	0	0	0	0
Initial Fut:	0	9	0	0	16	400	400	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	9	0	0	16	400	400	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	9	0	0	16	400	400	0	0	0	0	0
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.00	1.00	1.10	1.00	1.00	1.10	1.10	1.10	1.10	1.10	1.10
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	9	0	0	16	400	440	0	0	0	0	0
Critical Gap Module:												
MoveUp Timc:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	225	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	784	xxxx	xxxxx	xxxx	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1.00	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	784	xxxx	xxxxx	xxxx	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	0.0			0.0			9.3			0.0		

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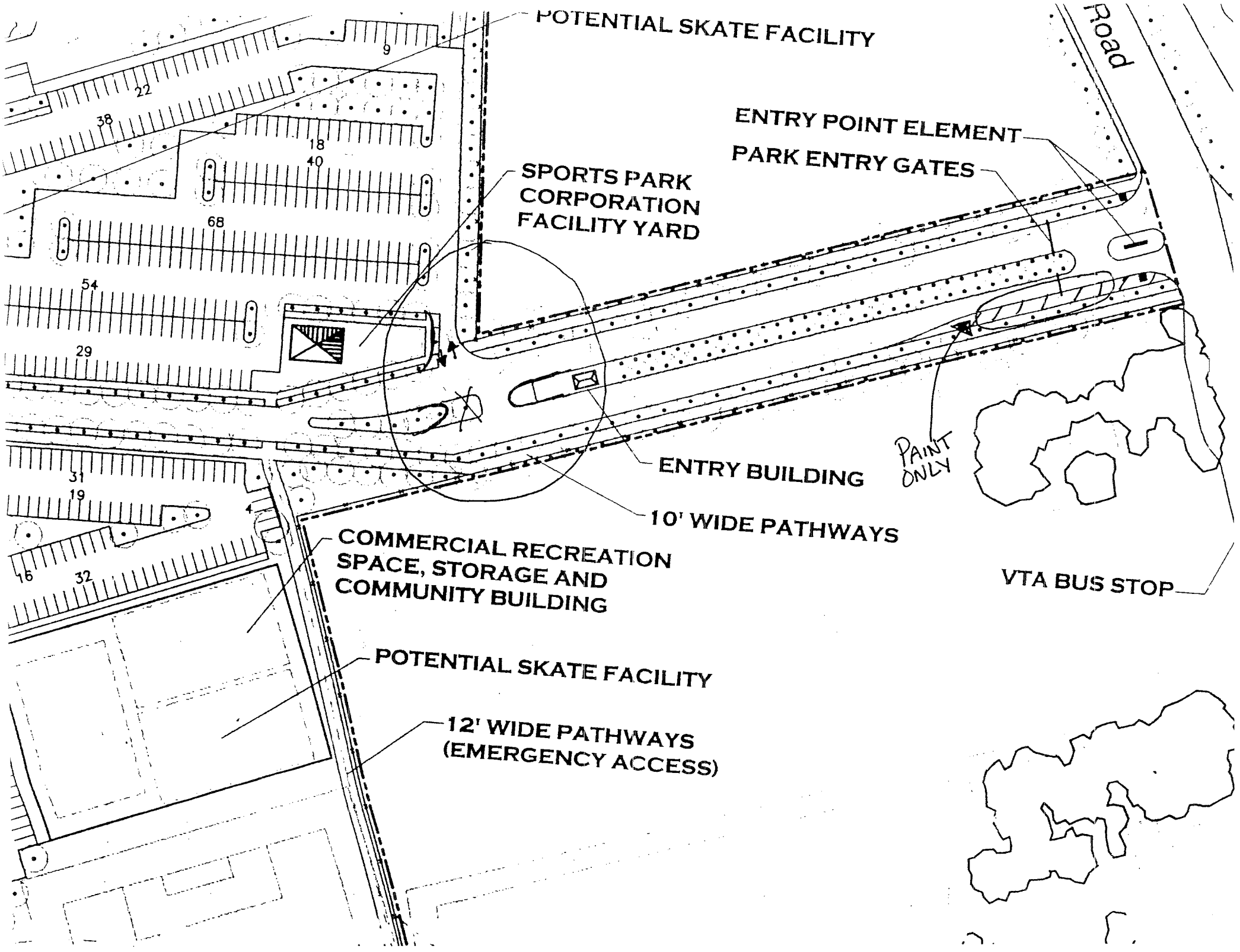
Project Buildout - Saturday Peak Hour

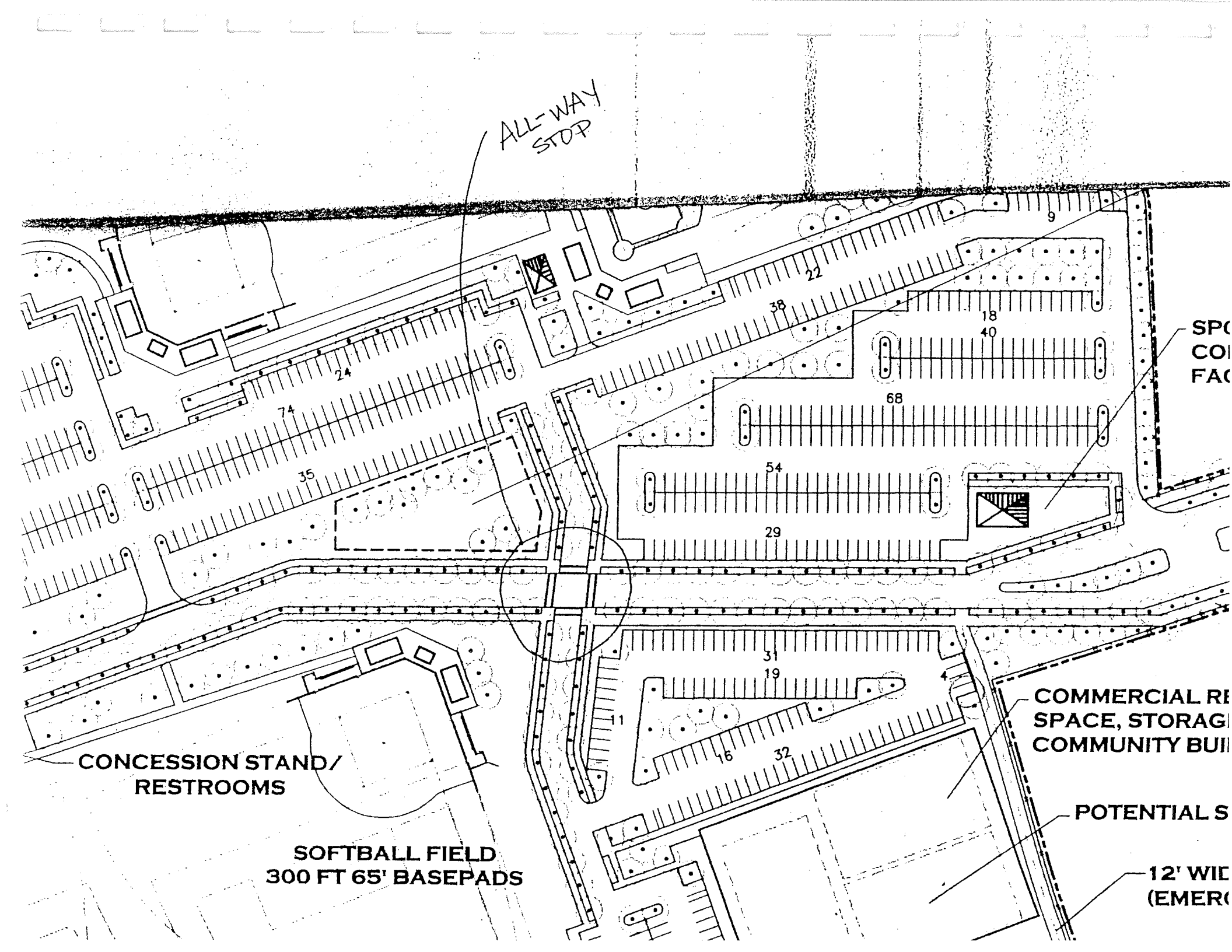
Demand Volume (arrival rate)	$\lambda =$	400
Lanes	L=	2
Movement Capacity (service rate)	$\mu =$	300
	$\rho = \lambda / (\mu * L)$	0.667
P(0) =	$1 - \rho =$	0.333
P(n) =	$(\rho^{n})*(1 - \rho)$	

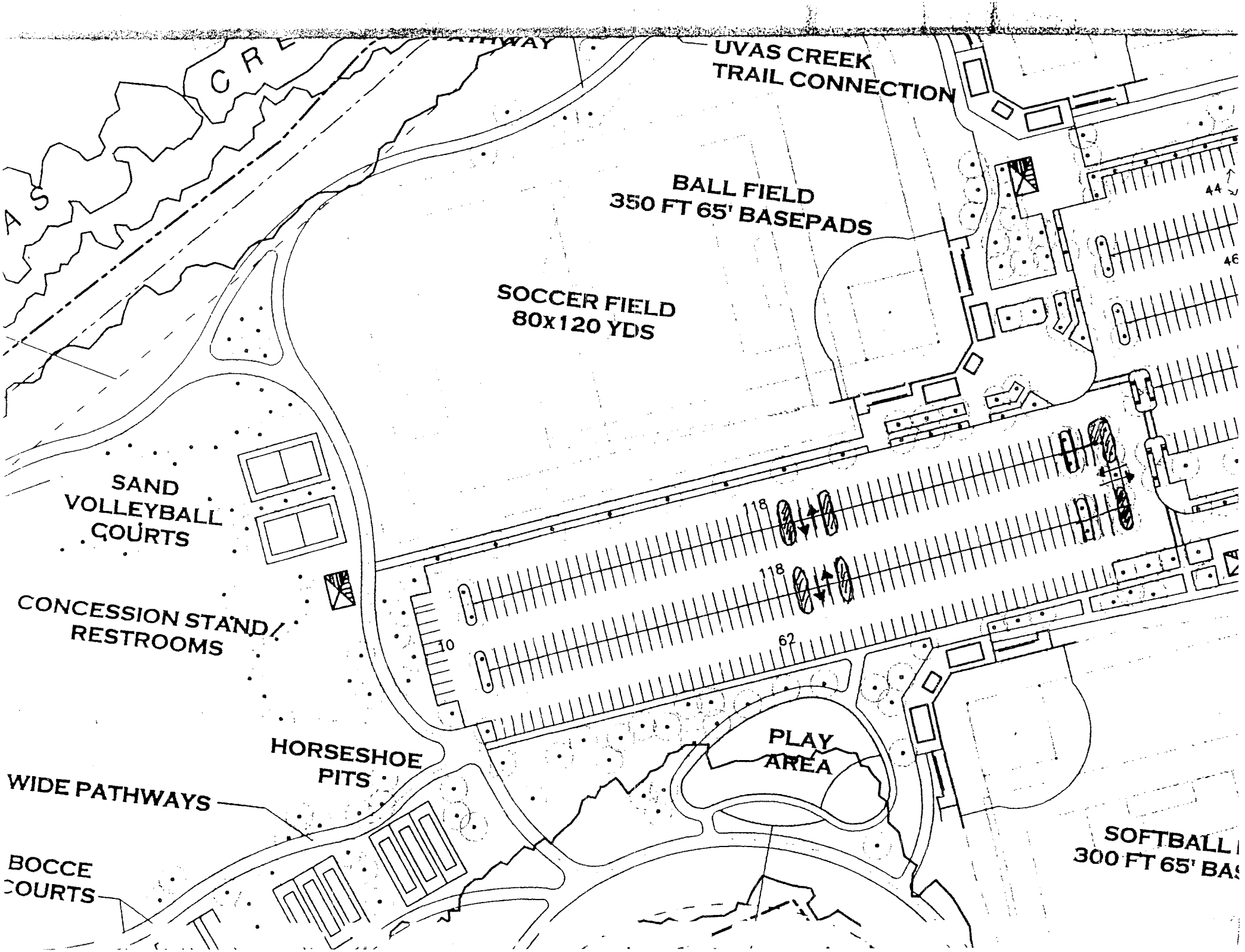
n	P(X=n)	P(X<=n)
0	0.333	0.333
1	0.222	0.556
2	0.148	0.704
3	0.099	0.802
4	0.066	0.868
5	0.044	0.912
6	0.029	0.941
7	0.020	0.961
8	0.013	0.974
9	0.009	0.983
10	0.006	0.988
11	0.004	0.992
12	0.003	0.995
13	0.002	0.997
14	0.001	0.998

APPENDIX F

RECOMMENDED SITE PLAN REVISIONS


POTENTIAL SKATE FACILITY
Road
ENTRY POINT ELEMENT
PARK ENTRY GATES
SPORTS PARK
CORPORATION
FACILITY YARD
PAINT
ONLY
ENTRY BUILDING
10' WIDE PATHWAYS
COMMERCIAL RECREATION
SPACE, STORAGE AND
COMMUNITY BUILDING
VTA BUS STOP
POTENTIAL SKATE FACILITY
12' WIDE PATHWAYS
(EMERGENCY ACCESS)
9
22
38
18
40
68
54
29
31
19
16
32


ALL-WAY STOP
9
22
38
18
40
24
74
68
35
54
29
31
19
4
11
16
32
CONCESSION STAND/ RESTROOMS
SOFTBALL FIELD 300 FT 65' BASEPADS
COMMERCIAL RE
SPACE, STORAGE
COMMUNITY BUI
POTENTIAL S
12' WID
(EMERG


UVAS CREEK
TRAIL CONNECTION
BALL FIELD
350 FT 65' BASEPADS
SOCCER FIELD
80x120 YDS
SAND
VOLLEYBALL
COURTS
CONCESSION STAND /
RESTROOMS
HORSESHOE
PITS
WIDE PATHWAYS
BOCCE
COURTS
PLAY
AREA
118
118
10
62
44
46

APPENDIX G

PARKING ESTIMATES

Gilroy Sports Park
Parking Estimates-by phase
Based on Saturday Peak

Phase	Demand	Supply
I	0	0
II	196	206
III	130	137
IV	280	294
V	280	294
VI & VII	110	116
VIII & IX	0	0
Total	996	1047

Supply = Demand + 5%

Gilroy Sports Park
Parking Estimates-by phase

Worst Case (Saturday Peak Hour)

Phase I - No Parking Demand

Phase II
Saturday Peak Hour

Colt Baseball

36 players	x	1 fields	=	36	players
36 spectators	x	1 fields	=	36	spectators
				72	people
				2.0	persons/vehicle
				36	vehicles

Little League

30 players	x	2 fields	=	60	players
35 spectators	x	2 fields	=	70	spectators
				130	people
				2.1	persons/vehicle
				62	vehicles

Worst Case: All spectators and players for 2 consectutive games on every field on site at one time.

	98	vehicles per game
	2	games
Phase II Total	**196**	**vehicles**

Phase III

Saturday Peak Hour

Softball

30 players	x	1 fields	=	30 players
30 spectators	x	1 fields	=	30 spectators
				60 people
				2.0 persons/vehicle
				30 vehicles

Commercial Rec., Special Events 70 vehciles

Worst Case: All spectators and players for 2 consectutive games on every field on site at one time.

	30 vehicles per game
	2 games
Phase III Game Subto	60 vehicles
Comm Rec./Special	70 vehicles
Phase III Total	**130 vehicles**

Phase IV

Saturday Peak Hour

Softball

30 players	x	4 fields	=	120 players
30 spectators	x	4 fields	=	120 spectators
				240 people
				2.0 persons/vehicle
				120 vehicles

Special Events 40 vehicles

Worst Case: All spectators and players for 2 consectutive games on every field on site at one time.

	120 vehicles per game
	2 games
Phase IV Game Subto	240 vehicles
Special Events	40 vehicles
Phase IV Total	**280 vehicles**

Phase V

Saturday Peak Hour

Softball

30 players	x	4 fields	=	120 players
30 spectators	x	4 fields	=	120 spectators
				240 people
				2.0 persons/vehicle
				120 vehicles

Special Events 40 vehicles

Worst Case: All spectators and players for 2 consectutive games on every field on site at one time.

	120 vehicles per game
	2 games
Phase V Game Subtot	240 vehicles
Special Events	40 vehicles
Phase V Total	**280 vehicles**

Phase VI & VII

Saturday Peak Hour

Softball

30 players	x	1 fields	=	30 players
30 spectators	x	1 fields	=	30 spectators
				60 people
				2.0 persons/vehicle
				30 vehicles

General Park Usage 50

Worst Case: All spectators and players for 2 consectutive games on every field on site at one time.

	30 vehicles per game
	2 games
Phase VI & VII Game	60 vehicles
General Park Usage	50 vehicles
Phase VI & VII Total	**110 vehicles**

Phases VIII & IX - No Parking Demand

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GILROY URBAN SERVICE AREA AMENDMENT 98-03

SUBSEQUENT FINAL EIR

SCH# 1998102079

PREPARED FOR

City of Gilroy Planning Division

February 2002

ENV 261

EMC PLANNING GROUP INC
A LAFCO URB PLANNING & DIVISION FIRM
[illegible]

GILROY URBAN SERVICE AREA AMENDMENT 98-03

SUBSEQUENT FINAL EIR

SCH# 1998102079

PREPARED FOR

City of Gilroy Planning Division
7351 Rosanna Street
Gilroy, CA 95020
Contact: Cydney Casper
408.846.0440

PREPARED BY

EMC Planning Group Inc
301 Lighthouse Avenue Suite C
Monterey CA 93940
Tel 831.649.1799
Fax 831.649.8399
emcgroup@emcplanning.com
www.emcplanning.com

February 2002

1.0 Introduction

The City of Gilroy, acting as lead agency, determined that the proposed addition of 140.21 acres to its Urban Service Area, (hereinafter "proposed project") may result in significant adverse environmental effects, as defined by the California Environmental Quality Act (CEQA) Guidelines section 15064. Therefore the City of Gilroy determined that an environmental impact report (EIR) be prepared to evaluate the potentially significant adverse environmental impacts of the proposed project.

The City of Gilroy certified the *Gilroy Sports Park and Urban Service Area Amendment Environmental Impact Report* (SCH#1998102079) on June 7, 1999. The certified EIR was prepared using the existing *Gilroy General Plan* land use designations for the project site. The City of Gilroy is in the process of adopting an updated general plan. The *Draft Gilroy 1999-2020 General Plan* includes changes in the land use designation for some of the parcels included in the USA amendment request. These parcels were evaluated in the certified EIR with an OPEN SPACE designation but are designated RESIDENTIAL NEIGHBORHOOD DISTRICT and COMMERCIAL – GENERAL SERVICES in the *Draft Gilroy 1999-2020 General Plan.*

The City of Gilroy applied to the Santa Clara County Local Agency Formation Commission (LAFCO) for the addition of the project site to the City's USA. Because of the probable upcoming changes to the general plan land use designations for the project site, LAFCO required further environmental analysis based on the expected new designations.

The *Gilroy Urban Service Area Amendment 98-03 Subsequent Draft Environmental Impact Report* (Subsequent Draft EIR) was prepared, and circulated for public review on April 11, 2000. The public review period ended on Thursday, May 25, 2000. CEQA Guidelines section 15200 indicates that the purposes of the public review process include sharing expertise, disclosing agency analysis, checking for accuracy, detecting omissions, discovering public concerns and soliciting counter proposals.

The *Gilroy Urban Services Area Amendment 98-03 Subsequent Final EIR* (Subsequent Final EIR) has been prepared to address comments received during the public review period and, together with the Subsequent Draft EIR, constitutes the Gilroy Urban Services Area Amendment 98-03 EIR.

Overview

The following is a brief overview of the organization of this Subsequent Final EIR. It is intended to inform the reader how this document was prepared and presented, and to identify the general contents within.

- **Section 1** contains an introduction to the Subsequent Final EIR well as this overview.

- **Section 2** contains written comments on the Subsequent Draft EIR, as well as the responses to those comments. No oral comments were submitted.

- **Section 3** contains a revised summary of the Subsequent Draft EIR, identifying the changes in the impacts and mitigation measures resulting from comments on the Subsequent Draft EIR.

- **Section 4** contains the revisions to the text of the Subsequent Draft EIR resulting from comments on the Subsequent Draft EIR.

2.0 Response to Comments

CEQA Guidelines section 15132(c) requires that the Subsequent Final EIR contain a list of persons, organizations, and public agencies who have commented on the Subsequent Draft EIR. A list of the correspondence received during the public review period is presented below.

CEQA Guidelines section 15132(b) and 15132(d) requires that the Final EIR contain the comments that raise significant environmental points in the review and consultation process, and written response to those comments. A copy of each correspondence received during the public review period is presented on the following pages. Numbers along the left-hand side of the letter identify each comment. A response to each comment that raises a significant environmental point is presented immediately following the letter. Where required, revisions have been made to the text of the Subsequent Draft EIR based on the responses to comments, and these are included in Section 4, Changes to the Draft EIR Text.

The following correspondence was received during the 45-day public review period, which ended on May 25, 2000.

1. County of Santa Clara Roads and Airports Department (Roads and Airports) (May 1, 2000);

2. California Department of Transportation (Caltrans) (May 22, 2000);

3. Santa Clara Valley Transportation Authority (VTA) (May 23, 2000);

4. County of Santa Clara Local Agency Formation Commission (LAFCO) (May 24, 2000);

5. Santa Clara Valley Water District (SCVWD) (May 25, 2000).

Table 1 summarizes the significant environmental issues raised in each letter.

TABLE 1

Response to Comments Summary by Topic

	Commenter				
Draft EIR Topic	**Roads and Airports**	**Caltrans**	**VTA**	**SCVWD**	**LAFCO**
No Environmental Comment					
Project Description				X	
Policy Consistency					X
Adequacy of Mitigation				X	
EIR Uses					
Aesthetics					
Agricultural Resources					X
Air Quality					
Biological Resources				X	
Cultural Resources					
Geology					
Hydrology and Flooding				X	
Noise					
Public Services					
Utilities					
Transportation/Circulation	X	X	X		
Cumulative Impacts					
Alternatives					

Source: EMC Planning Group Inc.

County of Santa Clara
Roads and Airports Department
Land Development Services

101 Skyport Drive
San Jose, California 95110-1302

RECEIVED
MAY 3 2000
Gilroy Planning Div.

May 1, 2000

Mr. Bryan Stice Melissa
Planner I
Community Development
City of Gilroy 7351 Rosanna Street
Gilroy, California 95020

Subject: USA 98-03--Gilroy Sports Park
Draft Environmental Impact Report (EIR)

Dear Mr. Stice:

Your letter dated April 7, 2000 along with the Draft Environmental Report for the subject project has been reviewed. Our comments are as follows:

1. Items 2, 3, and 4 from our previous letter dated March 8, 1999 are not addressed in this Draft EIR. 30% of the project traffic is using (Fig. 22) Santa Teresa and Thomas Road intersection, but EIR does not analyze it (Item 2).

2. Please submit Level of Service calculation using TRAFFIX.

Thank you for the opportunity to review the subject project. If you have any questions, please call me at 573-2464.

Sincerely,

Raluca Nitescu
Project Engineer

RN:rtj
Attachment: Letter dated 03/08/99
cc: SK, RVE, File

Board of Supervisors: Donald F. Gage, Blanca Alvarado, Pete McHugh, James T. Beall, Jr., S. Joseph Simitian
County Executive: Richard Wittenberg

County of Santa Clara

Roads and Airports Department
Land Development Services

101 Skyport Drive
San Jose, California 95110

March 8, 1999

Mr. Bryan Stice
Engineering Division
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

Subject: USA 98-03 – Gilroy Sport Park
Draft Environmental Impact Report

Dear Mr. Stice:

Your Draft Environmental Impact Report dated February 11, 1999 for the subject project has been reviewed. We have the following comments.

1. Please submit the Traffic Impact Report (TIR) reference mentioned on Pages 2-47 and 2-48.

2. The project needs to analyze Level of Service (LOS) at the intersections of Thomas Road/Santa Teresa Blvd. and Miller Avenue/Santa Teresa Blvd.

3. Table 9, Page 2-64 lists the Level of Service (LOS) as "F" for Saturday peak for Phase V., but on Page 2-76 under "Significant Impact" the LOS is listed as "E". Please let us know which one is right.

4. The LOS for Phase VI and VII is listed "F', but no analysis is performed.

The delay under Phase V is 45 seconds and it is mitigated by a proposed signal. The delay for Phase VI and VII is 117 seconds. Is any mitigation proposed for these two Phases.

Board of Supervisors: Donald F. Gage, Blanca Alvarado, Pete McHugh, James T. Beall, Jr., S. Joseph Simitian
County Executive: Richard Wittenberg

Thank you for the opportunity to review and comment on this project. Please call me at 573-2464 if you have any questions.

Sincerely

Raluca Nitescu
Project Engineer

RN:rtj
cc: S. Kandah
File

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Response to the Letter from County of Santa Clara Roads and Airports Department (May 1, 2000)

1. A revised traffic impact analysis (TIA), using updated traffic counts, was prepared for the proposed project by Fehr and Peers Associates in January 2002. The text and exhibits of the revised TIA are included in Appendix A. The calculation tables are available for review at the City of Gilroy Engineering Division.

(Item 2 from March 8, 1999 letter) The revised TIA includes an analysis of the intersection of Thomas Road and Santa Teresa Boulevard. The intersection operates at LOS C under existing conditions, and would continue to operate at LOS C at project build-out conditions and cumulative conditions.

The geometry of the intersection of Thomas Road and Santa Teresa Boulevard has been improved, and signal lights added, with funding from the City of Gilroy and the developer of the Eagle Ridge residential development.

(Item 3 from March 8, 1999 letter) There was an error in the Draft EIR prepared in February 1999. This was corrected in the Final EIR, prepared in April 1999.

(Item 4 from March 8, 1999 letter) This comment was addressed in the Final EIR prepared in April 1999. Mitigation measures proposed in the Draft EIR for other identified impacts also mitigated the Phase VI and Phase VII impacts to a less than significant level.

2. LOS calculations were prepared using TRAFFIX modeling software. The complete TIA, including the calculation tables, has been forwarded to Roads and Airports, and is also available for review at the City of Gilroy Engineering Division.

STATE OF CALIFORNIA - BUSINESS, TRANSPORTATION AND HOUSING AGENCY

GRAY DAVIS, Governor

DEPARTMENT OF TRANSPORTATION
P O BOX 23660
OAKLAND, CA 94623-0660
Tel: (510) 286-4444
Fax: (510) 286-5513
TDD (510) 286-4454

May 22, 2000

SCL-101-5.26
1998102079
SCL101599

Mr. Bryan Stice
City of Gilroy, Planning Division
7351 Rosanna Street
Gilroy, CA 95020

Dear Mr. Stice:

Draft Environmental Impact Report (DEIR) for the Gilroy Sports Park, City of Gilroy

Thank you for continuing to include the California Department of Transportation (Caltrans) in the environmental review process for the proposed Gilroy Sports Park project. We have examined the DEIR and offer the following comments:

1. Detailed calculation for all analyses should be included in the DEIR.

2. Freeway segments and ramps on US 101 should be analyzed for traffic weaving and level of service (LOS) under all conditions for both AM and PM peak periods.

3. Queuing analysis and vehicle storage lengths for the Monterey Street at Luchessa Avenue and Monterey Frontage Road intersections and US 101 southbound and northbound ramps should be provided.

4. Please explain how the trips generated by the proposed project will be distributed over various phases of construction. The DEIR should also specify the number of trips generated during each construction phase.

5. After implementing all relevant mitigation measures, please provide the LOS for the intersections on Monterey Street at Luchessa Avenue and Monterey Frontage Road.

Should you require further information or have any questions regarding this letter, please call Haiyan Zhang of my staff at (510) 622-1641.

Sincerely,

HARRY Y. YAHATA
District Director

By Jean C. R. Finney

JEAN C. R. FINNEY
District Branch Chief
IGR/CEQA

c: Katie Shulte, State Clearinghouse

Response to the Letter from California Department of Transportation (May 22, 2000)

1. LOS calculations were prepared using TRAFFIX modeling software. The complete TIA, including the calculation tables, has been forwarded to Caltrans, and is also available for review at the City of Gilroy Engineering Division.

2. The revised TIA includes an analysis of level of service on the U.S. Highway 101 segments and ramps. The freeway segments would operate at LOS B and LOS C at project conditions. According to the traffic engineer, there are no weaving sections on the studied segments of U.S. Highway 101. The TIA was prepared in accordance with VTA requirements. VTA does not require a cumulative level analysis of freeway segments.

3. The revised TIA includes an analysis of queuing and vehicle storage lengths at six locations, including the four U.S. Highway 101 ramps, and two locations along Monterey Road. While vehicle queuing would extend beyond the left turn pockets on north bound Monterey Road at Monterey Frontage Road and at Luchessa Avenue under unmitigated project conditions, with mitigation measures presented in the Subsequent Draft EIR, this situation would be mitigated to a less than significant level. There would be no impacts from queuing at the U.S. Highway 101 ramps.

4. Figure 21 on page 2-91 summarizes the project trip generation for each phase of the sports park, and for both the commercial and residential components of the proposed project. Because there are no specific development projects proposed for the commercial and residential components of the proposed project, it in not possible to assign trips associated with those components to a particular time frame. The sports park is expected to be built during a 20-year period, but the timeframe for build-out of the commercial and residential components is unknown. For purposes of the TIA, it is assumed that build-out of the commercial and residential components would occur within 20 years. Construction-generated traffic would be spread out over at least a 20-year timeframe, with only relatively small portions of the sports park developed at any given time. Construction traffic would be a small portion of overall traffic generated by the proposed project during the approximately 20-year build-out timeframe.

5. At project build-out, with mitigation incorporated, the intersection of Monterey Road and Luchessa Avenue, and the intersection of Monterey Road and Monterey Frontage Road would both operate at LOS C during the peak periods.

SANTA CLARA
Valley Transportation Authority

May 23, 2000

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MAY 25 2000
Gilroy Planning Div.

City of Gilroy
Department of Community Development
7351 Rosanna Street
Gilroy, CA 95020-6141

Attention: Bryan Stice, Planner I

Subject: Gilroy Sports Park Subsequent Environmental Impact Report Draft

Dear Mr. Stice:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the Subsequent Environmental Impact Report Draft (DSEIR) for the development of the Gilroy Sports Park, a 133.2-acre sports park accommodating a variety of activities, at the southwest corner of Thomas Road and Highway 101. We have the following comments.

On November 20, 1998, April 2, 1999 and May 10, 1999, VTA staff commented on the first NOP, Draft EIR and Final EIR for this project. Then on January 12, 2000, we commented on the Notice of Preparation of a Draft Subsequent EIR for this project.

1. Existing Transit Service
On Page 2-82, the DSEIR identifies *Route 17A* as a bus route currently operating within one-half mile of the project site. References to *Route 17A* should be deleted from the DSEIR as the route was discontinued effective January 2000 due to low ridership.

The other bus route identified in the DSEIR, *Route 68*, continues to operate on Princevalle Street, West Luchessa Avenue and Thomas Road, north and west of the project site. The nearest bus stops are approximately one-half mile walking distance from the northern edge of the sports complex.

2. In the section discussing consistency with Santa Clara County Local Agency Formation Commission Policies on Page 1-51, the DSEIR notes that "*The Santa Clara Valley Transportation Authority would continue to provide public transportation at the project site.*" With the nearest bus stops about one-half mile away, service is just outside the range of being within comfortable walking distance of the project. Therefore, the language should be changed to "*The Santa Clara Valley Transportation Authority would continue to provide public transportation in the vicinity of the project site.*" Currently, VTA has no plans to provide transit services directly to or adjacent to the project site.

3 Pedestrian Access Improvements

On Page 2-85, the SDEIR states that "*A sidewalk is provided along the north side of West Luchessa Avenue between Monterey Street and Princevalle Street. Sidewalks are not provided along Monterey Frontage Road or Monterey Road.*"

To allow patrons of the project to safely and conveniently access the nearest existing bus stops on Thomas Road, VTA staff recommend that the City also consider providing a sidewalk along the south side of Thomas Road. The sidewalk could connect with the Uvas Creek Trail, which will be extended by the project, to create a continuous pedestrian and bicycle pathway from the sports complex to the bus stops.

4 Design Elements

As the design of the project continues, VTA staff urge the City to ensure that urban design for this and other related projects in the area feature the following elements:

- Narrow local streets with sidewalks which directly connect the neighborhood, commercial areas and sports park. This allows residents to access the park and commercial areas by car, foot or bike without burdening the regional transportation network.
- A local street network that could accommodate efficient delivery of transit services.
- Building design in which parking garages and lots are not the prominent feature facing the streets.
- A network of walking and biking paths that connect the sports park, the neighborhood and commercial services.
- Buildings that front the streets with small setbacks. This creates a pedestrian-friendly environment.

We appreciate the opportunity to review this project and request that future plans and additional information about this project be forwarded to VTA for review and comment. As noted in our previous letters, we are still considering the possibility of bringing bus service to the sports park. VTA staff would like to work with City and project staffs on this possibility.

If you have any questions, please call Lauren Bobadilla of my staff at (408) 321-5776.

Sincerely,

Derek A. Kantar
Environmental Program Manager

DAK:LGB:kh

cc: Roy Molseed, VTA Senior Environmental Analyst

Response to the Letter from Santa Clara Valley Transportation Authority (May 23, 2000)

1. The comment is noted. The reference to Route 17A will be deleted.

2. The comment is noted. The text will be changed to reflect this information.

3. With development of the parcels fronting on Luchessa Avenue (formerly Thomas Road), sidewalks would be installed, consistent with the City of Gilroy street improvement standards.

4. The comment is noted. Additional environmental review will be required at the time that specific development proposals are submitted to the City. The *Revised Draft General Plan* contains policies aimed at achieving many of the project designs recommended in this comment.

County of Santa Clara

Local Agency Formation Commission

County Government Center, East Wing
70 West Hedding Street, 10th Floor
San Jose, California 95110
(408) 299-2424 FAX 295-1613
Autumn Arias, Executive Director

RECEIVED

MAY 31 2000

Gilroy Planning Div.

May 24, 2000

Melissa Durkin, Planner
City of Gilroy
Community Development Department
7351 Rosanna Street
Gilroy, CA 95020

Re: USA 98-03 Gilroy Urban Service Area Amendment
Subsequent Draft Environmental Impact Report

Melissa

Dear Ms. Durkin:

Thank you for the opportunity to review the Gilroy Urban Service Area Amendment Draft Subsequent Environmental Impact Report. Santa Clara County Local Agency Formation Commission (LAFCO) has a number of comments regarding the DEIR, specifically relating to the project's conformance with County and LAFCO plans and policies.

I. CONSISTENCY WITH COUNTY GENERAL PLAN

A. Growth and Development Policy C-GD 1 (Page 1-44)

"Growth and Development Policy C-GD 1: Most of the future urban growth of Santa Clara County should be accommodated within the existing urban areas, through infill development, rather than expansion of the urbanized area into hillsides and resource areas.

Consistency: The proposed project would expand growth into an area that contains prime farmland, a valuable resource. However, the land is contiguous with developed portions of the City of Gilroy to the north and east and additional urban development exists within one-half mile to the west of the project site. The project is a pocket of agricultural land that is largely surrounded by urban development. A review of the approved but not yet developed or completed projects in the City of Gilroy indicates that growth does take place within, or adjacent to, urban areas. The proposed project is consistent with this policy."

Comments

1 This proposal is not within the existing Urban Service Area (USA). It is not within the existing city limits. There may be available infill sites that could accommodate this proposal (i.e., the Sports Park as well as residential and commercial development.) The

Commissioners: Blanca Alvarado, Donald F. Gage, Manny Diaz, Suzanne Jackson, Susan Vicklund Wilson
Commission Secretary: (408) 299-4321

findings of the Vacant Land Inventory should be included in the SEIR to assist in explaining the conclusion that infill opportunities are unavailable within the USA and so expansion into resource areas is necessary. In addition, the fact that development of other areas takes place adjacent to urban areas is irrelevant to consistency of this project with this policy. Therefore, this proposal is **not consistent** with this policy.

B. Growth and Development Policy C-GD 7 (Pages 1-46 and 47)

"Growth and Development Policy C-GD 7: Urban expansion should be planned on a staged, orderly basis, consistent with applicable plans (e.g. city, County, countywide plans) and the availability of needed urban services and facilities. The discouragement of expansion of cities' Urban Service Areas should be recommended to the LAFCO.

***Consistency:** The project site has been in the City of Gilroy planning area since 1979 when the current general plan was adopted. The 20-year planning area is expected to accommodate approximately 20 years of urban growth. The City of Gilroy USA is expected to accommodate growth for an approximate five-year period. As development occurs within the existing USA it is necessary for the City to add new areas to its USA to maintain approximate five-year inventory of developable land. The City has determined that the project site should now be added to the USA.*

The project site is contiguous with developed portions of the City of Gilroy to the north and east and additional urban development exists within one-half mile to the west of the project site. The project site is a pocket of agricultural land that is largely surrounded by urban development. Development of the project site would result in orderly expansion of the City.

*Urban services are available close to the project site and will be extended into the project site to serve the approved Sports Park. The proposed project is **consistent** with this policy."*

Comments

2. The fact the City needs more land in the USA to maintain a five years supply should be corroborated by information from the vacant land inventory. The analysis should include the inventory of vacant land available for a specific land use and the rate of consumption of land for that specific purpose.

C. Growth and Development Policy C-GD 8 (Pages 1-47 and 48)

"Growth and Development Policy C-GD 8: Proposals to annex land or expand a city's urban service area boundaries shall be approved only if:
a. the city, special districts and affected school districts have the ability to provide all needed public services and facilities to the area within five years and without lessening existing levels of service;
b. the existing supply of land within the city's USA accommodates no more than

five years of planned growth;
c. the area proposed for urban development is contiguous to existing urban areas.

Consistency: Each of these factors is considered below:

The City of Gilroy approved the Gilroy Sports Park for a portion of the project site and will provide potable water, recycled water and sewer service to the project site for that project. The city has adequate potable water and recycled wastewater supplies and sufficient wastewater treatment capacity to accommodate the proposed project. The proposed project would be served by the city police and fire department without the need for new facilities. The Gilroy Unified School District will collect development impact fees from development that occurs on the project site as allowed by State law.

Land within Gilroy's Urban Service Area is expected to be substantially developed within five years. As development occurs within the existing USA it is necessary for the City to add new areas to its USA to maintain an approximate five-year inventory of developable land. The City of Gilroy last requested a USA amendment in October 1997. The City has determined that the project site should now be added to the USA. The project site is contiguous with urban development on the north and east.

The proposed project is ***generally consistent*** *with this policy."*

Comments

3 As the project includes the residential and commercial aspects in addition to the Sports Park, an evaluation of services to these specific projects should also be included.

Again, the vacant land inventory should be used to quantify and determine the vacant land available to analyze if the recreational, residential, and commercial development proposed for this site could be alternatively located on sites within the USA.

D. Growth and Development Policy C-GD 9 (Page 1-48)

"Growth and Development Policy C-GD 9: *"Proposals to annex land or expand the USA of a city for the purpose of adding lands for employment should be approved only if:*

lands planned for employment overall do not exceed the capacity of the city's planned housing supply; or

the city's housing element of its General Plan can document that the housing needs of all segments of the community population are being met as stipulated by state law.

Consistency: Each of these factors is considered below:

The maximum probable development of the project's commercial parcels does not exceed the capacity of the City of Gilroy's planned housing supply.

The City of Gilroy has recently updated its Housing Element, although it has yet to be certified by the State. Figure 5-1 of the housing element contains a summary of quantified objectives, 1988-2001. The estimates are based on past program performance, construction trends, land availability, and future program funding assumptions. The objectives address below market rate units, rehabilitated or replaced units, very low, low, moderate and above moderate income units.

The proposed project is ***consistent*** *with this policy.*

Comments

4 The policy requires that employment overall, not just that proposed by this project, does not exceed the capacity of City's planned housing supply. The total figures for the number of jobs and housing units created by this project should be used to establish this fact. The proposed project cannot be evaluated for consistency without supporting housing and commercial figures.

II. CONSISTENCY WITH LAFCO POLICIES

A. LAFCO Urban Service Area Amendment Policy 4 (Pages 1-49, 50, 51)

"Urban Service Area Amendment Policy 4: *LAFCO will consider factors such as the following to determine the local and regional impacts of a proposed Urban Service Area amendment:*

The ratio of lands planned for residential use to land planned for employment-producing use;
The existence of adequate regional and local transportation capabilities to support the planned city growth;
Ability of the city to provide urban services to the growth areas without detracting from current service levels;
The ability of school districts to provide school facilities;
Whether the conversion of agricultural and other open space lands is premature,
or if there are other areas into which to channel growth
The role of special districts in providing services;
Environmental considerations which may apply;
The impacts of proposed city expansion upon the County as a provider of services;
Fiscal impacts on other agencies.

Consistency: *Each of these factors is discussed below:*
The proposed project would include approximately equal acreage of residential use and commercial use. The residential uses would generate approximately 500

residents. A fiscal analysis has been prepared that evaluates the number of job opportunities expected to be generated by the proposed commercial development.

The proposed project is served by U.S. Highway 101, Monterey Street and other local streets, and the extension of the Uvas Creek Trail, which has been approved. Bus service is planned to serve the Sports Park and the sports park master plan includes a bus turn-around and stop.

The City of Gilroy would extend domestic and recycled water supply lines and sewer and storm drain lines to the project site as part of the approved sports park project. The City of Gilroy police and fire departments would provide public safety services to the project site. The City has existing or planned capacity to accommodate the proposed project without any decrease in the level of service available to other areas of the city. The project site was included in the City's Water Master Plan *and* Sewer Master Plan.

The proposed project will add approximately 135 students to Gilroy schools. The Gilroy Unified School District would collect impact fees as allowed by State law. The proposed project would result in the conversion of 54.8 acres of agricultural land to urban uses. The project site has been in the City of Gilroy 20-year planning area since the adoption of the current Gilroy General Plan *in 1979.*

Most of the land surrounding the City of Gilroy ahs development constraints, such as the presence of valuable wildlife habitat, flooding risks or prime farmland. Much of the land on which the existing City is built had similar characteristics. The alternative site that was identified for study in this SEIR also contained substantial areas of farmland. As the City grows, a certain amount of these valuable resources are often converted into urban land. The City is preparing a vacant land analysis to quantify the type and extent of vacant land available within its USA.

The Santa Clara Valley Transportation Authority would continue to provide public transportation at the project site. An additional service may be extend into the project site. The City of Gilroy would provide most direct services.

The USA amendment is subject to the environmental analysis of this SEIR. The proposed project would result in the conversion of prime agricultural land to non-agricultural uses, which is an unavoidable significant impact. Other potential impacts have been identified in this EIR and mitigation measures are presented to reduce those impacts to a less than significant level.

The City of Gilroy would provide police, fire and general government services currently provided by the county if the proposed project is approved. No water or sewer services are currently provided to the project site. The County would continue to provide some community health and social services to residents at the project site. Demand for these would increase with the increase in population. An increase in population within city limits would to some extent also impact

County services for law enforcement and parks. A fiscal analysis has been prepared for the proposed project.

The Santa Clara Valley Transportation Authority may incur increased costs to serve the project site.

The proposed project is generally ***consistent*** *with this policy."*

Comments

5 The number of jobs and the housing units proposed should be clearly stated to determine if a jobs-housing balance can be established.

The proposed project would be removing these parcels from agricultural production prematurely. Again, growth should be channeled within the existing Urban Service Area. A clear distinction can be made between agricultural land inside and outside of an Urban Service Area; in order to promote orderly development, land inside of an Urban Service Area should be used first. With this in mind, it is clear that this land is being removed from agricultural production prematurely, and therefore this proposal is **not consistent** with this policy.

III. Other Items

6 The Gilroy Agricultural Lands Area: The existence of an *agricultural preserve* is mentioned in the SEIR as a mitigation for conversion of agricultural land for recreational, commercial, and residential purposes. Although the SEIR acknowledges this does not mitigate the impact to a less than significant level, it nonetheless overly emphasizes the compensation for conversion of agricultural land as part of this project in light of the City of Gilroy's possible plan/recent discussion to remove lands from the *agricultural preserve.*

7 Additional Information: The fiscal analysis and vacant land analysis should be included in the SEIR to provide factual information that supports the document's conclusions. Also, information on the schedule for adoption of City's General Plan Amendment process is needed as the land uses on which this analysis is conducted are not finalized.

If you have any questions regarding these comments, you can reach me at 408/299-3800 x7027. Again, thank you for the opportunity to comment on the Gilroy Urban Service Area Amendment Draft Environmental Impact Report. We look forward to your responses to comments.

Sincerely,



Neelima Palacherla
Executive Director

Response to the Letter from County of Santa Clara Local Agency Formation Commission (May 24, 2000)

1. The sports park is an approved project. The sports park was approved for the project site by the City on June 7, 1999. Although the sports park remains outside the City limits and USA, it is located within the 20-year planning area for Gilroy. The site on which the sports park was approved is designated as OPEN SPACE and PARK/PUBLIC FACILITIES in the *Gilroy General Plan* and as PARK/RECREATION FACILITY in the *Revised Draft General Plan.*

Three alternative sites for the sports park were analyzed in the EIR certified by the City of Gilroy on June 7, 1999. Because a large, level site is required for the sports park, the range of potential alternative sites was limited. The approved sports park site is closer to utility infrastructure, regional transportation infrastructure, and lodging compared to the alternative sites. The sports park will draw users from throughout the region, and good regional access to the site is important. Traffic impacts were worse at all of the alternative sites.

The commercial and residential land proposed for inclusion in the USA amendment was included for the purpose of attaining a largely contiguous extension of the USA. A reduced project size alternative is evaluated in the Subsequent Draft EIR, which excludes the four commercial parcels south of the sports park access road from the USA amendment request, while retaining the contiguity of the area to the existing USA. This alternative reduces the project site from 140.2 acres to 125.2 acres, and the commercial area from 27.1 to 12.1 acres. The commercial parcels north of the sports park access road, and the residential parcels north of the sports park site, are necessary in conjunction with the sports park site, to avoid an island or narrow peninsula of land outside the USA. Alternative sites for the commercial and residential uses are analyzed in the Subsequent Draft EIR.

A vacant land inventory was prepared in conjunction with the proposed project, but was not complete at the time the Subsequent Draft EIR was released for public review. The vacant land inventory was completed in June 2000, reflecting project approvals as of March 15, 2000, and has been updated for inclusion in the Subsequent Final EIR to reflect RDO allocations as of April 2000 (RDO allocations are approved by the City in April of even-numbered years), and site and architecture approvals through December 21, 2001. The Vacant Land Inventory is included in Appendix B. The vacant land inventory indicates that there is a nine-year supply of residential land, a 23-year supply of General Services Commercial land, and a four-year supply of Commercial Industrial land. Although the residential and commercial uses could be located on sites already within the USA, the sports park, is an already approved project, and alternative sites within the USA were less appropriate.

2. The vacant land inventory indicates that the City has a nine-year supply of residential land, a 23-year supply of General Services Commercial land and a four-year

supply of Commercial Industrial land. A five-year supply of land is approximately 44 acres for General Services Commercial land, approximately 15 acres for Commercial Industrial land, and approximately 2,000 units for residential land. Therefore, the project site would accommodate approximately a three-year supply of General Services Commercial land and a nine-year supply of Commercial Industrial land. At an average density of nine units per acre, the project site would accommodate approximately 250 housing units, or a half-year supply.

The City has approved the sports park on the project site and desires to include it within its USA. No equally appropriate site was available for the sports park within the existing USA. The residential and commercial area are included in the USA amendment request to achieve a more contiguous USA area than would be possible with inclusion of the sports park site alone.

3. Fire protective services, police protective services, schools, water supply, and wastewater disposal were analyzed for the entire proposed project, including recreational, residential, and commercial components. No significant adverse environmental impacts were identified.

4. There are currently approximately 20 commercial jobs for every acre of commercial development in the City of Gilroy. Based on this current ratio, the 27 acres of proposed commercial development could be expected to generate approximately 540 jobs. According to the fiscal analysis prepared for the sports park, the sports park would generate approximately four full-time-equivalent jobs. Thus, the total jobs generated would be approximately 544. At an average density of nine units per acre, the project site would accommodate approximately 250 housing units. Therefore, the jobs-housing balance of the project site alone would be approximately 2.17.

The proposed general plan jobs-housing balance of between 2.59 and 3.03 indicates a surplus of jobs compared to housing. However, the *Draft Environmental Impact Report for the City of Gilroy Revised Draft General Plan* found the high jobs-housing balance to have a less than significant impact on the regional jobs-housing balance (Denise Duffy and Associates, September 2001). The proposed project land uses are consistent with those of the *Revised Draft General Plan*. As a component of the proposed general plan's build-out, the proposed project would contribute towards that change in the jobs-housing balance. However, the job-housing balance on the project site is lower than that of the overall general plan area, so the proposed project serves to moderate the overall jobs-housing balance.

5. Refer to the response to Comment 4.

6. The Subsequent Draft EIR acknowledges that the Gilroy Agricultural Lands Area does not reduce impacts to agricultural lands to a less than significant level. Although the proposed project would result in the loss of approximately 133.2 acres of prime farmland, the proposed project would not remove any land from the Gilroy Agricultural Lands Area.

7. The comment is noted. The vacant land inventory is included in Appendix B and the fiscal analysis is included in Appendix D.

Santa Clara Valley Water District

Community Projects Review Unit, Main Building

5750 Almaden Expressway, San Jose, CA 95118
My Phone Number: (408) 265-2607 ext. 2319
My Fax Number: (408) 266-9751
My E-mail: yvonarro@scvwd.dst.ca.us

Date: 5/25/00

To	Company or Agency	Fax Number
Mr. Bryan Stice	City of Gilroy	846-0429

From: Yvonne Arroyo **Total Pages, including cover sheet:** 2

Subject: Gilroy Sports Park DEIR, City of Gilroy File USA 98-03

Message:

The Santa Clara Valley Water District (District) has reviewed the Draft Environmental Impact Report (DEIR) for the subject project, received on April 10, 2000. The District has the following comments on the DEIR. The original letter will follow in the mail.

1 **Page 2-36, Mitigation Measure 3**

The potential introduction of non-native invasive plant species to the Uvas Creek riparian corridor was identified in the DEIR as a potentially significant impact. The mitigation measure consists of making provisions in the landscape plans that only native grasses or other native non-invasive species will be allowed in the Uvas Creek habitat corridor. The District recommends that this measure be modified to allow only native, non-invasive species grown from local (preferably within 5 miles of the project site or within the Uvas Creek watershed) parent stock.

2 **Page 2-49, Project Site Setting**

The first line in the first paragraph on this page states that the hydrology study prepared by Schaaf and Wheeler in May 1999 encompasses all but the northern-most portions of the project site. However, the hydrology study also does not include the proposed commercial areas of the project site. The limits of the hydrology study assumed that the proposed commercial area was to be open space in its developed condition. In addition, the

3 hydrology study was based on the Federal Emergency Management Agency 100-year flow rate of 14,000 cubic feet per second (cfs) for existing conditions. The District and the Army Corps of Engineers have calculated a 100-year design flow rate of 17,000 cfs. The design flow rate of 17,000 cfs should be used in the hydrology study to determine the potential impacts of the future sports park, proposed residential areas and proposed commercial areas.

4 **Page 2-50, Storm Water Runoff**

The District disagrees that the increase in land use from open space/agricultural to commercial and residential will not have any impact on the existing flood flows in Uvas Creek without verification through a hydrology study. Analysis should be provided showing that the post-developed runoff from the proposed commercial and

residential areas will not be greater than the pre-developed condition. The analysis should show that there will not be any increase in flood flows to Uvas Creek after development. The analysis should study the 100-year flood condition as well as more frequent flood events. Mitigation measures, such as detention ponds, should be designed on an area-wide or regional basis rather than on an individual basis.

5 **Page 2-56, Less Than Significant Impact-Increased Flood Flows on Uvas Creek**
See above comment.

6 **Page 2-56, Mitigation Measure 13**
The proposed hydrology study should include the aforementioned analysis of pre-developed runoff and post-developed runoff. The development should be designed such that any increase in runoff will be mitigated for.

Any questions may be referred to Ms. Yvonne Arroyo at (408) 265-2607, extension 2319.

We look forward to reviewing the Environmental Impact Report when it is available.

Sincerely,

for Sue A. Tippets, P.E.
Engineering Unit Manager
Community Projects Review Unit

Response to the Letter from Santa Clara Valley Water District (May 25, 2000)

1. The comment is noted. The wording of the mitigation measure has been revised to include the condition that plant material be locally obtained. It should be noted that the equivalent mitigation measure that was adopted by the City when the Gilroy Sports Park and USA Amendment EIR was certified on June 9, 1999, and which applies to the sports park portion of the project site, did contain a provision that plant materials be locally obtained.

2. The hydrology study prepared by Schaaf and Wheeler in May 1999 included almost all of the commercial areas of the project site, with the exception of approximately 1.5 acres at the northern end of the proposed commercial area. Most of the residential area was not included in the study. A revised hydrology study was prepared by Schaaf and Wheeler in January 2002, and includes the proposed residential and commercial portions of the project site. The revised hydrology study is included in Appendix C.

3. The revised hydrology study addresses both the Federal Emergency Management Agency (FEMA) and U.S. Army Corps of Engineers (Corps) flow rates for Uvas Creek in analyzing potential storm flooding on the project site. Using the Corps 100-year flow rate of 17,000 cubic feet per second (cfs), the overflow onto the project site would be 6,600 cfs, compared to 4,640 cfs using the FEMA 100-year flow rate of 14,000 cfs. Mitigation Measure 13, requiring a hydrology study prior to approval of specific development plans within the 100-year flood areas of the project site, has been revised to require the use of the Army Corps of Engineers flow rates for Uvas Creek.

4. The revised hydrology report analyzes existing and projected storm water run-off from the project site at build-out. Construction of the proposed project would increase run-off from the project site. However, the hydrology report concludes that the peak run-off times would be off-set from the peak storm flows in Uvas Creek and therefore would not contribute significantly to flood conditions in Uvas Creek.

Due to grading of the sports park site, which lowers the middle of the sports park site to provide a reservoir during flood conditions, no increase in local off-site flood levels would occur as a result of the proposed project.

5. Refer to the response to Comment 4.

6. Refer to the response to Comment 4.

3.0 Revised Summary

Project Background and History

To address a lack of sports facilities for City residents, the City of Gilroy proposed the construction of a sports park on land immediately south of the City. The proposed project included the construction of the sports park and related off-site improvements and a USA amendment request for the 78.36-acre sports park site and 61.85 acres of surrounding land. Because only a 100-foot wide driveway connected the sports park site to the existing USA, the surrounding land was included in the USA amendment to make the amendment area more contiguous to the existing USA. The City of Gilroy certified the EIR for the sports park and USA amendment and approved the sports park master plan on June 7, 1999. A USA amendment request was submitted to the Santa Clara County LAFCO on June 23, 1999.

Santa Clara County LAFCO requested additional environmental review of the USA amendment request based on proposed new land use designations in the *Revised Draft General Plan.* The parcels that were a part of the USA amendment request but not proposed for sports park development were analyzed in the certified EIR based on the existing *Gilroy General Plan* designation of OPEN SPACE. The *Revised Draft General Plan* designates 27.72 acres of this area as RESIDENTIAL – NEIGHBORHOOD DISTRICT and the remaining 27.13 acres of this area as COMMERCIAL – GENERAL SERVICES. This SEIR addresses the anticipated change in general plan designation for these parcels.

Proposed Project

The proposed project includes a USA amendment for the entire 140.21-acre project site, which includes the *approved* Gilroy Sports park and habitat buffer on 78.36 acres, an *approved* trail extension and habitat buffer on 7.00 acres, *proposed* residential land use designation on 27.72 acres and *proposed* commercial land use designation on 27.13 acres.

The entire 140.21-acre project site is proposed for inclusion into the City' s USA, and annexation to the City. The proposed project includes 27.13 acres designated in the *Revised Draft General Plan* as COMMERCIAL – GENERAL SERVICES. Commercial development would take place on two portions of the project site along Monterey Frontage Road, straddling the sports park entry road. Two parcels totaling 12.12 acres are located north of the sports park entry road and four parcels totaling 15.01 acres are located south of the sports park entry road. The proposed project includes 27.72 acres designated in the *Revised Draft General Plan* as RESIDENTIAL – NEIGHBORHOOD DISTRICT. The residential area would be immediately north of the approved Gilroy

Sports Park and the area proposed for COMMERCIAL – GENERAL SERVICES designation along Monterey Street and Monterey Frontage Road.

Summary of Impacts and Mitigation Measures

Pursuant to CEQA Guidelines section 15063 an initial study was prepared to determine the potentially significant effects of the proposed project. The initial study determined that certain issues would have a potentially significant impact on the environment. These issues concerned agricultural considerations, geology, hydrology, public services and service systems, biological resources, transportation/circulation, air quality, noise, archaeological resources, and aesthetics. Those issues determined to have a potentially significant environmental impact were studied in greater depth in an EIR. The City of Gilroy certified that EIR on June 7, 1999. Based on proposed new land use designations in the *Revised Draft General Plan*, this SEIR was prepared for the annexation of the entire project site and for commercial and residential development on land previously studied as open space. Environmental impacts and proposed mitigation measures for the proposed project are presented in Table S-1.

Summary of Other CEQA Considerations

Unavoidable Significant Adverse Environmental Impacts

An unavoidable significant adverse environmental impact is a significant adverse impact that cannot be reduced to a less than significant level through the implementation of mitigation measures. CEQA Guidelines section 15093 requires that a lead agency make findings of overriding considerations for unavoidable significant adverse environmental impacts before approving a proposed project.

Loss of Agricultural Land

The loss of prime farmland is considered a significant and unavoidable adverse environmental impact. The proposed project would result in the loss of the 54.8 acres of prime farmland (though some of this land is used for commercial and rural residential uses). In conjunction with the approved Gilroy Sports Park, which is within the project site, the loss of prime farmland would be 133.21 acres. The implementation of the Gilroy Agricultural Lands Area by both the City of Gilroy and the County of Santa Clara serves as a partial mitigation for losses of prime farmland in southern Santa Clara County. However, it does not reduce the loss of prime farmland to a less than significant level and the proposed project would still be considered to have a significant and unavoidable impact on prime farmland.

Noise Impacts

Activities at the approved, but not yet constructed sports park, including athletic events and traffic entering and exiting the project site would generate long-term noise. The noise generated by these activities would be up to 63 dBA_{DNL}, thereby exceeding acceptable City standards (60 dBA_{DNL}) at the proposed residential area north of the sports park. In addition, activities at the approved, but not yet constructed sports park, including spectator shouting and public address system announcements, would generate short-term, annoyance noise at the residential area. The short-term noise generated by these activities would be up to 80 dBA.

Mitigation measures are available that would reduce both long-term and short-term operational noise impacts to a less than significant level. To reduce the long-term noise to a less than significant level, a six-foot tall acoustically effective barrier would be required along the northern boundary of the sports park site. To reduce flanking noise, the barrier would continue along the east boundary of the residential area for a distance of 100 feet.

Implementation of the mitigation measures necessary to reduce the noise impacts to a less than significant level would not be feasible. The location of the barrier is partly within the SCVWD flood flowage easement, and placement of the barrier would potentially impede the flow of floodwaters and could result in increased flooding impacts in other areas. Therefore, sports park noise impacts on the proposed residential area would be an unavoidable significant impact.

At General Plan build-out, exterior noise levels from traffic on Monterey Street would exceed City standards at adjacent proposed residential areas. Noise exceeding City noise standards would be a significant adverse environmental impact. Although a noise attenuation barrier would reduce this impact to a less than significant level, this portion of the project site is located within a flood zone, and a sound attenuation barrier would not be feasible if the barrier were to interfere with flood flows or affect off-site flood levels. Additionally, a noise barrier would place a visually obtrusive element along southern Monterey Street, a principal gateway designated in the *Draft Gilroy 1999-2020 General Plan*. This could result in a secondary visual impact. Because of the potential for secondary impacts to hydrology and aesthetics, exterior noise levels in excess of City standards in this location would be an unavoidable significant impact.

At General Plan build-out, exterior noise levels from traffic on West Luchessa Avenue would exceed City standards at the proposed residential areas adjacent to that street. A sound attenuation barrier would be required to reduce the level of noise to within City standards. Because of unknown variables, the exact requirements for mitigation of the noise impact cannot be determined at this time. It is probable that reducing noise to an acceptable level would require a sound attenuation barrier that is taller than would be considered aesthetically acceptable by the City. Implementation of a mitigation measure presented in Section 2.8 Noise would reduce the impact, but because the height of the attenuation barrier would be limited, the impact would probably not be reduced to a less than significant level.

Cumulative Impacts

Cumulative impacts are those environmental impacts resulting from the cumulative effects of approved but not yet built projects and probable projects in the area of the proposed project. Cumulative impacts were based on projects in the southern part of Gilroy. Investigation indicated that the proposed project might make significant contributions to cumulative impacts in the areas of agricultural resources, air quality hydrology, and transportation/circulation. Cumulative impacts to agricultural resources were determined to be significant and unavoidable. Cumulative impacts to transportation were found to be mitigated to a less than significant level by project level mitigation measures. No cumulative impacts were found in the areas of air quality and hydrology.

Agricultural Considerations

The proposed project would add 133.2 acres of prime farmland to the City of Gilroy Urban Service Area. Land within the Urban Service Area is generally expected to be developed within an approximate five-year timeframe. Prime farmland is a non-replaceable resource. Each cumulative project that involves the conversion of prime farmland to non-agricultural uses contributes to the depletion of this resource.

Transportation/Circulation

A traffic impact assessment prepared for the proposed project determined that the increase in traffic associated with the proposed project and other proposed or existing development would result in traffic congestion at three intersections and along one roadway segment. Mitigation measures in Section 2.14 Transportation/ Circulation would reduce ~~this~~ these impacts to a less than significant level.

Significant Irreversible Environmental Changes

The proposed project would result in the permanent loss of prime agricultural land. While this loss is mitigated in part by the establishment of the Gilroy Agricultural Lands Area, the prime agricultural land lost to the proposed project is not replaceable. The loss of prime agricultural land would be a significant irreversible change.

Growth Inducing Impacts

The proposed project itself is an extension of urban services into a previously un-served area. Although all urban service infrastructure is currently available near the project site, the approval of the USA amendment would make that infrastructure available to the project site itself and would result in future growth and development in that area.

The project site is currently within the City of Gilroy 20-year development area. The proposed project would transfer the project site into the City of Gilroy USA. Provision of urban services and development within a USA is generally expected to occur within

an approximate five-year timeframe. The Gilroy Sports Park has previously been approved for a portion of the project site, and a residential development is undergoing the RDO process for the northern portion of the project site. Approval of the USA amendment request would encourage and facilitate development within the project site.

Extension of services to the southern parcels on the project site and development of these parcels could result in development pressure on the land south of the project site. Although this area is designated in the *Revised Draft General Plan* as OPEN SPACE, the landowners may request a USA amendment and a change in general plan designation to open their land to development. Similar pressures may be felt to the west of Uvas Creek where a finger of land less than one-half mile wide would remain outside the Gilroy USA. These areas were included in the *Water Master Plan* and the *Sewer Master Plan.*

Summary of Alternatives Analysis

The following alternatives to the proposed project were analyzed to determine if they would achieve project objectives while minimizing environmental impacts. The following project alternatives were analyzed:

- Alternative #1 "No Project" alternative; The USA request is not approved by Santa Clara County LAFCO and no development takes place on the portion of the project site outside the sports park. The approved sports park is developed outside the urban service area at its approved location.

- Alternative #2 Reduced Project Size alternative; The USA request is reduced by 15.01 acres by eliminating the four parcels located south of the sports park access road. The resulting project site has a total of 125.20 acres, with 27.72 acres of proposed residential area and 12.12 acres of proposed commercial area. The sports park is added to the USA as part of this alternative.

- Alternative #3 Alternative Site alternative; An addition to the Gilroy USA is made on the west side of Monterey Street at Day Road in northern Gilroy. The project has approximately 25 acres of proposed residential area and 25 acres of proposed commercial area. The approved sports park is developed outside the USA at its already approved location.

The "No Project " alternative is the environmentally superior alternative, because it eliminates the unavoidable significant impact of loss of prime farmland and it results in reduced environmental impacts. Although there are no environmental impacts for the "No Project" alternative, it does result in the highest water use because it retains the project site in water-intensive agricultural use. For this reason it is considered worse than the proposed project and other alternatives in terms of impacts to the water supply.

The Reduced Project Size alternative is the next best alternative. It reduces the magnitude of the unavoidable significant impact to agricultural resources, and also reduces impacts on air quality, hydrology and transportation. The Reduced Project Size

alternative would not significantly reduce the potential noise impacts at the residential development along Monterey Road and West Luchessa Avenue. If mitigation fails to fully mitigate noise in those areas, the noise impacts would be significant and unavoidable.

The Alternative Site alternative reduces conversion of agricultural land, and especially conversion of Prime Farmland. More of the Alternative Site is already developed than the project site. The Alternative Site alternative may have slightly reduced impacts on biological resources, and would eliminate the possibility of a significant unavoidable impact from noise. The Alternative Site alternative also reduces the hydrological impacts of the proposed project.

TABLE S-1

Summary of Impacts and Mitigation Measures

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Aesthetics	**Change in Rural Character** Development of the project site would permanently alter the existing rural character of the area. The view from U.S. Highway 101 would become more urban than it is currently. However, surrounding parcels to the north and east are already developed and the approved sports park will provide an area of transition between the built and rural environments.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Aesthetics	**Nighttime Lighting** The proposed project would place residences near the planned athletic field lights of the approved Gilroy Sports Park. Several of the planned lights are within 400 to 500 feet of, and aimed towards the nearest homes. These field lights would be directly visible from these houses' windows.	**Potentially Significant**	1	Residential development on the parcels north of the sports park shall provide a landscape plan that includes a double row of trees along the sports park boundary, utilizing tree species that will attain a crown between 30 and 50 feet above street level prior to occupancy of the houses located within 100 feet of the sports park.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Agricultural Resources	**Loss of Prime Farmland** Approval of the Urban Service Area amendment and development of parcels adjacent to the sports park site, would result in the loss of 54.85 acres of designated prime farmland. Approximately 49.85 acres of this farmland would be converted from agricultural production. **Cumulative Project Loss of Prime Farmland.** Approval of the Urban Service Area amendment and development of parcels adjacent to the sports park site, in conjunction with development of the approved sports park, would result in the loss of 133.21 acres of designated prime farmland. Approximately 128.21 acres of this farmland would be converted from agricultural production.	**Unavoidable Significant**	N/A	The establishment of the Gilroy Agricultural Lands Area by both the City of Gilroy and the County of Santa Clara serves as a regional mitigation for losses of prime farmland in southern Santa Clara County outside of the agricultural lands area. Although this regional mitigation has been implemented, it does not reduce the loss of prime farmland to a less than significant level and the proposed project would still be considered to have a significant and unavoidable impact on prime farmland.	**Unavoidable Significant**
Agricultural Resources	**Conflict With Williamson Act Contract.** Six of the parcels on the project site were previously under Williamson Act contract. None of these contracts is currently in effect. The parcels most recently in Williamson Act contract were non-renewed effective in January 1999.	**No Impact**	N/A	None Required	**No Impact**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Agricultural Resources	**Effect on Adjacent Agricultural Uses.** Implementation of the proposed project could induce the adjacent farmland to the south of the project site and nearby farmland to the west of the project site to be converted to non-agricultural uses. These parcels adjacent to the project site are within the proposed City of Gilroy 20-year planning area but are proposed to be designated for open space uses. Development pressures could result in a change of general plan designation and subsequent development.	**Potentially Unavoidable Significant**	N/A	The establishment of the Gilroy Agricultural Lands Area by both the City of Gilroy and the County of Santa Clara serves as a regional mitigation for losses of prime farmland in southern Santa Clara County outside of the agricultural lands area. Although this regional mitigation has been implemented, it does not reduce the loss of prime farmland to a less than significant level and the proposed project would still be considered to have a significant and unavoidable impact on prime farmland.	**Potentially Unavoidable Significant**
Air Quality	**Proposed Project Operations** BAAQMD determines the thresholds of significance for general plans, master plans annexations and similar projects based on the project's consistency with the *Clean Air Plan.* The proposed project is consistent with the *Draft Gilroy 1999-2020 General Plan*, which is in turn consistent with the *Clean Air Plan.*	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Air Quality	**Project Construction**	**Potentially Significant**	2	Dust control measures shall be incorporated into all permits for any phase of proposed construction on the project site.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Loss of Habitat.** Due to continuous human interaction, agricultural fields typically provide little habitat for wildlife and do not represent a significant biological resource.	**No Impact**	N/A	None Required	**No Impact**
Biological Resources	**Invasive Plant Species.** The riparian habitat along Uvas Creek could be affected by the presence of non-native, invasive plant species.	**Significant**	3	Project plans shall include a habitat buffer designed to include appropriate locally obtained native plant species and shall not include plantings of non-native, invasive plant species. Wherever possible, the east side of the trail shall be planted with native grasses or other native species to provide additional native habitat.	**Less Than Significant**
Biological Resources	**Raptors.** Construction activities in or near the riparian woodland habitat found along Uvas Creek could result in the direct loss of white-tailed kite, northern harrier, Cooper's hawk, and short-eared owl nests, including eggs and young, or the abandonment of an active nest by the adults.	**Potentially Significant**	4	A field survey shall be conducted by a qualified biologist to determine if active raptor nests are present in the construction zone or within 250 feet of the construction zone if any construction would occur during the nesting and/or breeding season of raptors potentially nesting in the areas proposed for development (generally March 1 through August 1). If active nests are found, at the discretion of the biologist, clearing and construction within 250 feet shall be postponed or halted until the nests are vacated and juveniles have fledged and there is no evidence of a second attempt at nesting.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Burrowing Owls.** Construction activity along the slope of the levee in the northwest corner of the project site, could result in the direct loss of burrowing owl nests, including eggs and young, or the abandonment of an active nest by the adults.	**Potentially Significant**	5	Field surveys shall be conducted to determine if burrowing owls are present in the construction zone or within 250 feet of the construction zone if any construction would occur during the nesting and/or breeding season of burrowing owls potentially nesting in the area (February 1 through August 31) and/or during the winter residency period (December 1 and January 31). If active nests are found, a burrowing owl habitat mitigation plan shall be prepared.	**Less Than Significant**
Biological Resources	**Riparian Special-Status Species** Several special-status species may potentially occur in Uvas Creek and in the riparian habitat adjacent to Uvas Creek. Any adverse effects on these special-status species, if present, resulting from construction activities associated with the residential area adjacent to the riparian habitat would be a significant impact.	**Potentially Significant.**	6 7	A qualified biologist shall inform workers of the potential presence of the all special-status species, their protected status, work boundaries, and measures to be implemented to avoid loss of these species during construction activities. All food-related trash items shall be enclosed in sealed containers and regularly removed from the project area to deter attraction of potential predators	**Less Than Significant**
Biological Resources	**Effects of Nighttime Lighting on Wildlife** Lighting of roads in the proposed residential area could spill over into the riparian habitat and disturb wildlife, restrict the movement or activity of wildlife, or facilitate increased predation of wildlife species.	**Potentially Significant**	8	Luminaires in the proposed residential area shall be limited in height to 20 feet and shall be of a full cutoff design to reduce light spillage to adjacent areas. Luminaires located along a street adjacent to the Uvas Creek levee shall be located to the east side of the street.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Cultural Resources	**Historic Houses** The project site contains four potentially historic houses. These houses are likely to be removed to accommodate future development on the project site. The houses may also have significant buried historic resources associated with them.	**Potentially Significant**	9	Prior to removal of any of the potentially historic houses on the project site an historical evaluation shall be completed. The historic evaluation shall include an architectural description of the structure, an historic background for the property and the completion of an appropriate State Department of Parks and Recreation form with photographic documentation	**Less Than Significant**
Cultural Resources	Currently unidentified buried cultural resources may be found during construction on the project site.	**Potentially Significant**	10 11 12	The city shall contract with a qualified archaeologist to arrange a schedule for monitoring the project site during grading and excavation activities. If archaeological resources or human remains are discovered during construction, work shall be halted and the area shall be staked off. The project developer shall notify a qualified professional archaeologist. If human remains are found during construction there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of Santa Clara County is contacted to determine that no investigation of the cause of death is required.	**Less Than Significant**
Geology	**Seismic Hazards.** The proposed project exposes people or structures to a small risk of potential substantial adverse effects involving seismic hazards.	**Less Than Significant**	N/A	None Required	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Hydrology	**Flood Flows in Uvas Creek.** Storm water run-off from impervious surfaces could increase the rate of storm water discharge into Uvas Creek and the Pajaro River drainage.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Hydrology	**On-Site Flooding.** The proposed commercial area and portions of the proposed residential area are within 100-year flood zones as identified on the FEMA maps. The Gilroy Floodplain Control Ordinance allows development within 100-year floodplains provided certain measures are taken to prevent potential damage from flooding. Portions of the commercial area are within a 25-year flood zone based on a hydrology study conducted for the sports park. Development within these areas prone to flooding presents potential risks to health and safety of people and damage to buildings and property.	**Potentially Significant**	13	A hydrology report, based on the Army Corps of Engineers flow rates for Uvas Creek, shall be prepared to address the following requirements: • Site plans and building designs shall comply with the City of Gilroy Flood Plain Control Ordinance. • Development on the project site shall not impede the flow of floodwaters. • Procedures shall be developed and site plans designed that will assure that any materials, supplies or goods used, stored or hold for sale at the proposed use that may present health hazards or risks of water contamination during flood conditions are securely kept at least one foot above the 100-year flood level. • Development on the project site shall not result in an increase in floodwater levels off the project site.	**Less Than Significant** ~~**or**~~ ~~**Unavoidable Significant**~~

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Hydrology	**Secondary Impact–Off-Site Flooding.** Mitigation required for construction within the floodplain could potentially result in diversion of floodwaters and increases in flood levels off the project site.	**Potentially Significant**	13	See Above.	**Less Than Significant**
Hydrology	**Flood Flowage Easement.** SCVWD holds a flood flowage easement that restricts land use and development on a large portion of the project site. Inappropriate development within this easement could put structures at risk of damage and people at risk of injury or death from storm-related flooding.	**Potentially Significant**	13	See Above.	**Less Than Significant**
Hydrology	**Surface Water Quality During Construction.** Grading will expose sediments to rain or wind erosion and subsequent transportation of sediments to Uvas Creek. Materials used and wastes generated during construction would degrade water quality also. Non-point source pollutants from urban activity at the project site would be released	**Significant**	14 15	The City shall submit a Notice of Intent and detailed engineering designs to the Central Coast Regional Water Quality Control Board, and implement a Storm Water Pollution Prevention Plan that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site. The City shall submit plans for review by, and obtain an approved permit from the Santa Clara Valley Water District.	**Less than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Hydrology	**Surface Water Quality During Operation.** Contaminants common to urban area storm water and irrigation run-off could potentially result in the pollution of Uvas Creek and the Pajaro River. These contaminants could be transported to the drainage system, polluting downstream water systems.		16	A sedimentation basin shall be included in plans. Additional "best practices" operational measures may be required for specific projects.	**Less Than Significant**
Noise	**Long-Term and Short-term Noise from Sports Park Activities.** Athletic events and traffic entering and exiting the project site would generate long-term noise at the proposed residential area north of the sports park. Spectator shouting and public address system announcements, would generate short-term, annoyance noise at the residential area.	**Unavoidable Significant**	N/A	To reduce the long-term noise to a less than significant level, a six-foot tall acoustically effective barrier would be required along the northern boundary of the sports park site. The location of the barrier is partly within the SCVWD flood flowage easement. Placement of the barrier would potentially impede the flow of floodwaters and could result in increased flooding impacts in other areas.	**Unavoidable Significant**
Noise	**Exterior Traffic Noise at Residential Areas along Monterey Street.** At General Plan build-out, noise levels from traffic on Monterey Street would exceed City standards at adjacent proposed residential areas.	**Unavoidable Significant**	N/A	This portion of the project site is located within a flood zone, and a sound attenuation barrier would not be feasible if the barrier were to interfere with flood flows or affect off-site flood levels. Additionally, a noise barrier would place a visually obtrusive element along southern Monterey Street, a principal gateway designated in the *Draft Gilroy 1999-2020 General Plan.* This would result in a secondary visual impact.	**Unavoidable Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Noise	**Exterior Traffic Noise at Residential Areas along West Luchessa Avenue.** At General Plan build-out, noise levels from traffic on West Luchessa Avenue would exceed City standards at the proposed residential areas adjacent to that street.	**Unavoidable Significant**	17	A sound attenuation barrier eight feet in height shall be constructed along West Luchessa Avenue.	**Unavoidable Significant**
Noise	**Interior Noise Levels at Residential Areas.** Traffic and sports park noise at the proposed residential area would exceed 45 dBA.	**Potentially Significant**	18	An acoustical study shall establish engineering requirements to be included in construction plans to maintain interior noise levels at no greater than 45 dBA_{DNL}.	**Less Than Significant**
Noise	**Short-term Construction Noise.** Construction activities at the project site could result in high levels of noise.	**Significant**	19	Construction activities shall be limited to specified hours.	**Less Than Significant**
Fire Protection Services	**Fire Services** The proposed project does not result in the need for additional facilities for the provision of fire protective services, and would not decrease the level of these services provided to any part of the community.	**No Impact**	N/A	None Required	**No Impact**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Police Protection Services	**Police Services.** The proposed project does not result in the need for additional facilities for the provision of police services, and would not decrease the level of these services provided to any part of the community.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Schools	**Student Enrollment Exceeding Capacity** The proposed project would add approximately 120 students to the GUSD. Enrollment is currently over capacity at the District's elementary schools and high school. However, since some students drop out each year, actual attendance is close to capacity. The District is constructing a new elementary school and has plans to construct a new middle school. In addition, grade level re-distribution among schools will bring kindergarten through 8th grade enrollment close to capacity for each of those grade levels.	**Less Than Significant**	N/A	None Required	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Water Supply	**Construction of Potable Water and Recycled Water Infrastructure.** The proposed project does not require substantial extensions or upgrades to the existing potable or recycled water supply infrastructure. Existing or planned lines within adjacent street right-of-ways would serve the proposed project.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Water Supply	**City Water Supply.** The proposed project would result in an incremental increase in demand for potable water that is within the City of Gilroy's ability to provide.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Water Supply	**Groundwater Supply.** The proposed project would result in an overall decrease in water use. Less groundwater would be required from the Llagas Groundwater Sub Basin to supply the project site.	**Beneficial**	N/A	None Required	**Beneficial**
Waste water	**Construction of Wastewater Infrastructure.** The proposed project does not require substantial extensions or upgrades to the existing wastewater infrastructure. Existing or planned lines within adjacent street right-of-ways would serve the proposed project.	**Less Than Significant**	N/A	None Required	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Transportation Circulation	**West Luchessa Avenue/Princevalle Street.** Traffic impacts at this intersection would improve to acceptable levels with signalization that is already included in the City's Capital Improvement Budget, and is programmed for implementation in 2001 or 2002.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Transportation Circulation	**West Luchessa Avenue/Church Street.** The addition of project traffic to the West Luchessa Avenue/Church Street intersection would cause both overall intersection operations and the worst approach to deteriorate from acceptable operating levels to LOS F during both the PM and Saturday peak hours.	**Significant**	20	The following street improvements shall be made to the intersection of West Luchessa Avenue and Church Street: • installation of a traffic signal with two-phase operation; • re-configuration of the northbound and southbound approaches as necessary to provide one approach lane for all movements; • provision of one left-turn lane and one shared through and right-turn lane on the eastbound and westbound approaches.	**Less Than Significant**
Transportation Circulation	**Monterey Street/Luchessa Avenue.** The intersection of Monterey Street and Luchessa Avenue is projected to degrade from LOS C to LOS F during the PM peak hour with the addition of project-generated traffic.	**Significant**	21	The following street improvements shall be made to the intersection of Monterey Street and Luchessa Avenue: • construction of a second northbound left-turn lane and an exclusive eastbound right-turn lane; • addition of a right-turn arrow for the eastbound right-turn movement (so vehicles in this movement could move while the northbound left-turn movement has a green arrow).	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Transportation Circulation	**Monterey Street/Monterey Frontage Road.** The operation of the Monterey Street/Monterey Frontage Road intersection is projected to deteriorate from acceptable level under Background Conditions to LOS F during the PM and Saturday peak hours with the addition of project traffic and construction of the proposed traffic signal.	**Significant**	22	Following or in conjunction with the signalization of the intersection of Monterey Street and Monterey Frontage Road, the following street improvements shall be made: • re-configuration of the southbound approach as necessary to provide one left-turn lane, two through lanes, two right-turn lanes; • re-configuration of the westbound approach as necessary to provide one shared lane for all movements; • re-configuration of the northbound approach as necessary to two left-turn lanes, one through lane, one shared through/right- turn lane; • re-configuration of the eastbound approach as necessary to provide one exclusive left-turn lane, one shared through and left-turn lane, and one right-turn lane. • right-turn arrows shall be provided for the eastbound and southbound right-turn movements to provide LOS C intersection operations during all three study periods. This lane configuration will require split phase operation of the eastbound and westbound approaches.	**Less Than Significant**

4.0 Changes to the Draft EIR Text

The following discussion of significant unavoidable noise impacts is added to page S-2. The unavoidable significant noise impacts were included in the summary table on pageS-15 and S-16, and identified in the project noise analysis on page 2-60 through 2-68, but were inadvertently omitted from the summary text in the Subsequent DEIR.

Activities at the approved, but not yet constructed sports park, including athletic events and traffic entering and exiting the project site would generate long-term noise. The noise generated by these activities would be up to 63 dBA_{DNL}, thereby exceeding acceptable City standards (60 dBA_{DNL}) at the proposed residential area north of the sports park. In addition, activities at the approved, but not yet constructed sports park, including spectator shouting and public address system announcements, would generate short-term, annoyance noise at the residential area. The short-term noise generated by these activities would be up to 80 dBA.

Mitigation measures are available that would reduce both long-term and short-term operational noise impacts to a less than significant level. To reduce the long-term noise to a less than significant level, a six-foot tall acoustically effective barrier would be required along the northern boundary of the sports park site. To reduce flanking noise, the barrier would continue along the east boundary of the residential area for a distance of 100 feet.

Implementation of the mitigation measures necessary to reduce the noise impacts to a less than significant level would not be feasible. The location of the barrier is partly within the SCVWD flood flowage easement, and placement of the barrier would potentially impede the flow of floodwaters and could result in increased flooding impacts in other areas. Therefore, sports park noise impacts on the proposed residential area would be an unavoidable significant impact.

At General Plan build-out, exterior noise levels from traffic on Monterey Street would exceed City standards at adjacent proposed residential areas. Noise exceeding City noise standards would be a significant adverse environmental impact. Although a noise attenuation barrier would reduce this impact to a less than significant level, this portion of the project site is located within a flood zone, and a sound attenuation barrier would not be feasible if the barrier were to interfere with flood flows or affect off-site flood levels. Additionally, a noise barrier would place a visually obtrusive element along southern Monterey Street, a principal gateway designated in the *Draft Gilroy 1999-2020 General Plan*. This could result in a secondary visual impact. Because of the potential for secondary impacts to hydrology and aesthetics, exterior noise levels in excess of City standards in this location would be an unavoidable significant impact.

At General Plan build-out, exterior noise levels from traffic on West Luchessa Avenue would exceed City standards at the proposed residential areas adjacent to that street. A

sound attenuation barrier would be required to reduce the level of noise to within City standards. Because of unknown variables, the exact requirements for mitigation of the noise impact cannot be determined at this time. It is probable that reducing noise to an acceptable level would require a sound attenuation barrier that is taller than would be considered aesthetically acceptable by the City. Implementation of a mitigation measure presented in Section 2.8 Noise would reduce the impact, but because the height of the attenuation barrier would be limited, the impact would probably not be reduced to a less than significant level.

The following grammatical error on Page S-3 is corrected.

A traffic impact assessment prepared for the proposed project determined that the increase in traffic associated with the proposed project and other proposed or existing development would result in traffic congestion at three intersections and along one roadway segment. Mitigation measures in Section 2.14 Transportation/ Circulation would reduce ~~this~~ these impacts to a less than significant level.

The following change is made to page 1-51 to reflect the cessation of transit service on Route 17A:

f. The Santa Clara Valley Transportation Authority would continue to provide public transportation ~~at~~ near the project site. An additional service may be extend into the project site. The City of Gilroy would provide most direct services.

Mitigation Measure 3 on page 2-36 has been revised to require the use of locally obtained plant materials, and to remove a grammatical error.

Mitigation Measure

3. A landscape plan consistent with the Gilroy Consolidated Landscape Policy shall be prepared for common and street side planting areas ~~areas~~ abutting the Uvas Creek habitat corridor, subject to the review and approval of the City of Gilroy Planning Division. The landscape plan shall include appropriate locally obtained native plant species and shall not include plantings of non-native, invasive plant species. Native grasses or other native species shall be preferred in the areas adjacent to the Uvas Creek levee to provide additional native habitat in association with the Uvas Creek habitat corridor.

Mitigation Measure 6 on page 2-38 has been revised to state the correct party responsible for implementation of the measure.

Mitigation Measure

6. Prior to commencement of construction activities, the ~~city~~ applicant shall arrange for a qualified biologist to inform workers of the potential presence of the all special-status species, their protected status, work boundaries, and measures to be implemented to avoid loss of these species during construction activities.

Mitigation Measure 13 on page 2-56 has been revised to require the use of the Army Corps of Engineers flow rates in the preparation of development-specific hydrology studies.

Mitigation Measure

13. Any applicant for development within FEMA-delineated 100-year flood zones on the project site shall have a hydrology report, based on the Army Corps of Engineers flow rates for Uvas Creek, prepared for that development by a qualified hydrologist or engineer, to specify hydrology-related design requirements for the site and buildings, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to issuance of a building permit. The hydrology report shall address the following requirements:

    - Site plans and building designs shall comply with the City of Gilroy Flood Plain Control Ordinance.
    - Development on the project site shall not impede the flow of floodwaters.
    - Procedures shall be developed and site plans designed that will assure that any materials, supplies or goods used, stored or hold for sale at the proposed use that may present health hazards or risks of water contamination during flood conditions are securely kept at least one foot above the 100-year flood level.
    - Development on the project site shall not result in an increase in floodwater levels off the project site.

    Calculations for both the 25-year and 100-year flood events shall be submitted in support of these requirements. All grading, design or other recommendations of the hydrology report shall be incorporated into project plans.

Mitigation Measure 13 on page 2-59 has been revised to accurately state the City department responsible for review and approval.

Mitigation Measure

16. Project plans for any development proposed for the project site, subject to the review and approval of the City of Gilroy ~~Planning~~ Engineering Division shall include a sedimentation basin adequate for filtering out heavy storm water contaminants such as silt, and grease traps suitable for filtering out other urban pollutants to the extent feasible. Additional measures as presented in "Start at the Source, Design Guidance Manual for Storm Water Quality Protection," prepared by the Bay Area Storm Water Management Agencies Association and "Parking Lot Best Management Practices Manual," prepared by the Santa Clara Valley Urban Run-off Pollution Prevention Program may be required for specific projects. Any physical water quality safeguards shall be installed prior to

occupancy of the proposed development, and any best management practices plan must be implemented upon occupancy.

The following change is made to page 2-82 to reflect the cessation of transit service on Route 17A:

Transit Service. Bus service in Santa Clara County is operated by the Santa Clara Valley Transportation Authority (VTA). Currently, there ~~are two~~ is one bus routes operating within one-half mile of the project site, Route 68~~ and Route 17A~~.

~~*Route 17A* provides commute service between the intersections of Sixth and Hanna Streets and Southside Drive and Rossi Lane. Two northbound buses are provided during the morning commute period and two southbound buses during the evening commute period. Route 17A operates along Monterey Street, north of Luchessa Avenue, and Luchessa Avenue, east of Monterey Street.~~

The following discussion of significant unavoidable noise impacts is added to page 3-1. The unavoidable significant noise impacts were included in the summary table on pageS-15 and S-16, and identified in the project noise analysis on page 2-60 through 2-68, but were inadvertently omitted from Section 3 Related Issues in the Subsequent DEIR.

Activities at the approved, but not yet constructed sports park, including athletic events and traffic entering and exiting the project site would generate long-term noise. The noise generated by these activities would be up to 63 dBA_{DNL}, thereby exceeding acceptable City standards (60 dBA_{DNL}) at the proposed residential area north of the sports park. In addition, activities at the approved, but not yet constructed sports park, including spectator shouting and public address system announcements, would generate short-term, annoyance noise at the residential area. The short-term noise generated by these activities would be up to 80 dBA.

Mitigation measures are available that would reduce both long-term and short-term operational noise impacts to a less than significant level. To reduce the long-term noise to a less than significant level, a six-foot tall acoustically effective barrier would be required along the northern boundary of the sports park site. To reduce flanking noise, the barrier would continue along the east boundary of the residential area for a distance of 100 feet.

Implementation of the mitigation measures necessary to reduce the noise impacts to a less than significant level would not be feasible. The location of the barrier is partly within the SCVWD flood flowage easement, and placement of the barrier would potentially impede the flow of floodwaters and could result in increased flooding impacts in other areas. Therefore, sports park noise impacts on the proposed residential area would be an unavoidable significant impact.

At General Plan build-out, exterior noise levels from traffic on Monterey Street would exceed City standards at adjacent proposed residential areas. Noise exceeding City noise standards would be a significant adverse environmental impact. Although a noise attenuation barrier would reduce this impact to a less than significant level, this portion of the project site is located within a flood zone, and a sound attenuation barrier would

not be feasible if the barrier were to interfere with flood flows or affect off-site flood levels. Additionally, a noise barrier would place a visually obtrusive element along southern Monterey Street, a principal gateway designated in the *Draft Gilroy 1999-2020 General Plan*. This could result in a secondary visual impact. Because of the potential for secondary impacts to hydrology and aesthetics, exterior noise levels in excess of City standards in this location would be an unavoidable significant impact.

At General Plan build-out, exterior noise levels from traffic on West Luchessa Avenue would exceed City standards at the proposed residential areas adjacent to that street. A sound attenuation barrier would be required to reduce the level of noise to within City standards. Because of unknown variables, the exact requirements for mitigation of the noise impact cannot be determined at this time. It is probable that reducing noise to an acceptable level would require a sound attenuation barrier that is taller than would be considered aesthetically acceptable by the City. Implementation of a mitigation measure presented in Section 2.8 Noise would reduce the impact, but because the height of the attenuation barrier would be limited, the impact would probably not be reduced to a less than significant level.

Figures 29 and 30, showing the alternative site location and uses, were inadvertently omitted. These figures are presented on the following pages.

The following persons contacted have been added to page 4-1:

Ms. Cydney Casper, Planner I, City of Gilroy Planning Division.

Ms. Kristiann Choy, Fehr and Peers Associates Inc.

The following sources have been added to page 4-2:

City of Gilroy. *Revised Draft General Plan.* September 2001.

Denise Duffy and Associates. *Draft Environmental Impact Report for the City of Gilroy Revised Draft General Plan.* September 2001.

Fehr and Peers Associates Inc. *Gilroy Sports Park/USA Amendment Subsequent EIR TIA.* January 2002.

Schaaf and Wheeler. Gilroy Sports Park USA Amendment Draft Hydrology Study. January 10, 2002.

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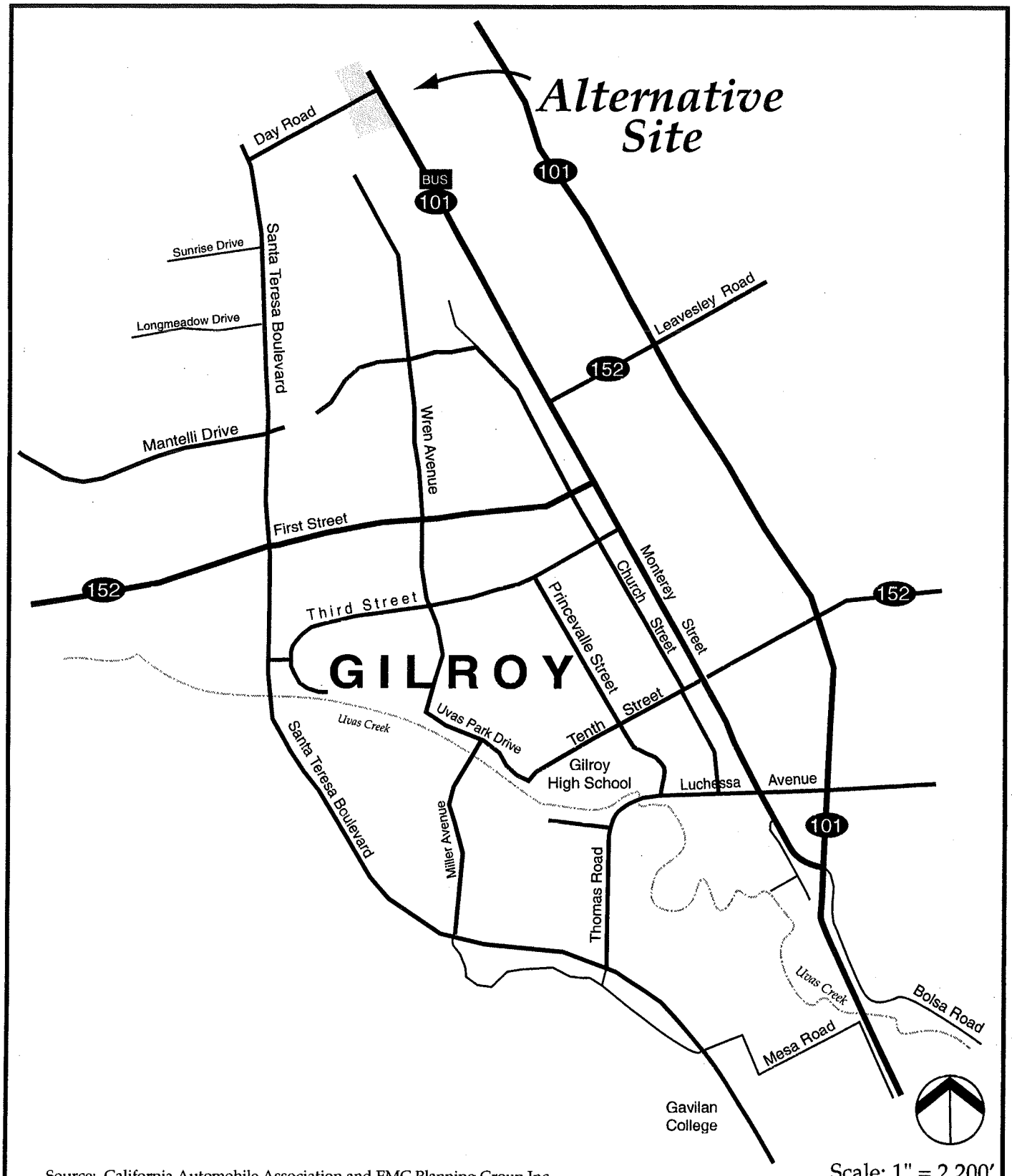

Source: California Automobile Association and EMC Planning Group Inc.

Scale: 1" = 2,200'

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy USA Amendment 98-03 Subsequent EIR

Alternative Site Location

Figure 29

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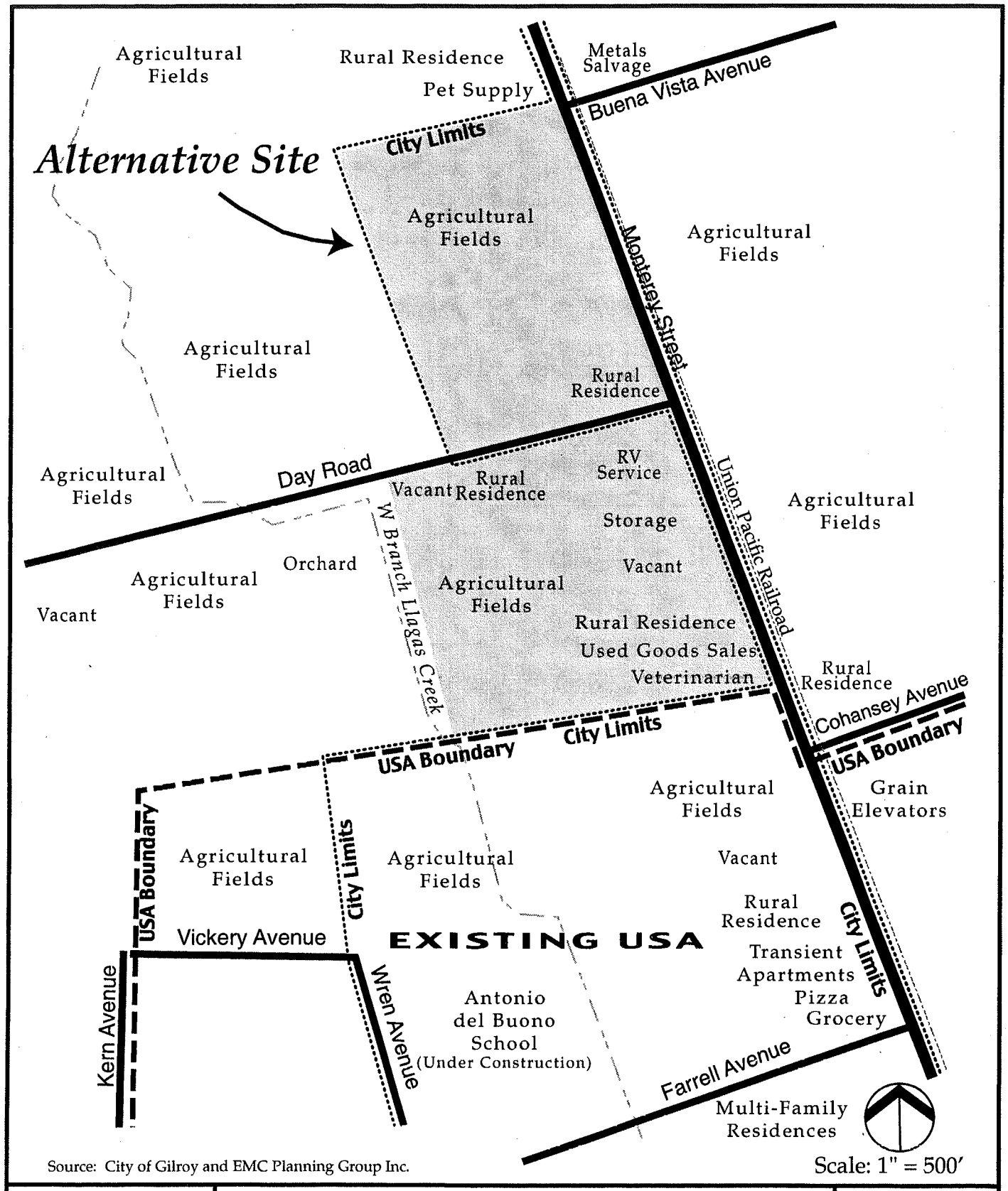

Source: City of Gilroy and EMC Planning Group Inc.

Scale: 1" = 500'

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy USA Amendment 98-03 Subsequent EIR

Alternative Site and Vicinity

Figure 30

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Appendix A

Updated Traffic Report

FINAL REPORT

TRANSPORTATION IMPACT ANALYSIS

GILROY SPORTS PARK AND USA AMENDMENT SUBSEQUENT EIR (Gilroy, California)

Prepared for:
EMC Planning Group, Inc.

Prepared by:
Fehr & Peers Associates, Inc.

February 2002

Final Report

TRANSPORTATION IMPACT ANALYSIS

for the

GILROY SPORTS PARK AND USA AMENDMENT SUBSEQUENT EIR (Gilroy, California)

Prepared for:
EMC Planning Group, Inc.

Prepared by:
Fehr & Peers Associates, Inc.

February 2002

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EXECUTIVE SUMMARY

This report presents the results of the Transportation Impact Analysis (TIA) conducted for the proposed Gilroy Sports Park and Urban Services Area (USA) amendment in Gilroy, California. A TIA was prepared in January 1999 for the sports park, while a January 2000 TIA was conducted to include the USA amendment. Since that time, the residential development proposed for some of the USA parcels has been withdrawn. The analysis contained in this report addresses the maximum allowable development on the amendment parcels; no specific commercial or residential developments are proposed at this time.

Project Description

The project site is located on the west side of Monterey Street, south of Luchessa Avenue, and is bounded on the west by Uvas Creek and on the south by Uvas Creek and Farman Lane. The purpose of the analysis is to identify the likely transportation impacts of the project on the surrounding roadway system and to identify improvements to mitigate significant impacts.

The project includes three components: a sports park (approximately 78 acres), residential uses (approximately 28 acres), and commercial uses (approximately 27 acres). The Gilroy Sports Park will contain 10 softball fields, three baseball fields, seven soccer fields (which are overlaid on the ball fields), a commercial recreation area, and a park area. The commercial recreation area will house a community meeting room and have the potential to house additional indoor athletic activities (roller hockey, indoor soccer, and BMX). The park area includes picnic areas, children's play areas, two sand volleyball courts, six bocce ball courts, and six horseshoe pits. The sports park will be developed in nine phases. Direct access to the project site will be provided via a main entryway on Farman Frontage Road.

There is no specific development proposed for the commercial or residential parcels. The commerical parcels will be zoned Commercial General Services, while the residential parcels will be zoned Neighborhood District. Per City staff direction, this analysis assumed the development of approximately 590,000 square feet (s.f.) of retail space on the commercial parcels and 147 units on the residential parcels. The commercial parcels front on Monterey Street and Farman Frontage Road. Direct access was assumed to be provided via one right-turn driveway on Monterey Street and one full access driveway on Farman Frontage Road serving the northern commercial parcels (those located north of the sports park entrance) and at least one full access driveway on Farman Frontage Road serving the southern commercial parcels. The residential parcels are located on the south side of Luchessa Avenue between Monterey Street and Uvas Creek. Direct access to the residential parcels was assumed to be provided by new public streets that will intersect with Luchessa Avenue at two locations and with Monterey Street at one location.

Project Traffic

The amount of traffic generated by the sports park was based on the planned operation of the park. The traffic generated by the residential and retail components was estimated using Institute of Transportation Engineers (ITE) trip generation rates (*Trip Generation*, 6th edition). A 30 percent pass-by reduction was applied to the trips generated by the retail component to account for traffic already traveling along Monterey Street that would be attracted to the shopping center. The project is estimated to add 20,738 weekday, 495 AM peak-hour trips (273 inbound and 222 outbound), 2,091 PM peak-hour trips (1,019 inbound/1,072 outbound), and 2,851 Saturday peak-hour trips (1,485 inbound/1,366 outbound) to the surrounding roadways. The project-generated traffic was assigned to specific roadway segments, intersections, and turning movements based on existing travel patterns in the vicinity of the site and the relative locations of complementary land uses.

Off-Site Traffic Impacts

The impacts of the proposed project were estimated following guidelines of the City of Gilroy and the Santa Clara Valley Transportation Authority (VTA), which is the congestion management agency for Santa Clara County. The operations of the seven key intersections, four roadway segments, one two-lane highway segment, and two freeway segments were evaluated.

Three of the key intersections are unsignalized under Existing Conditions. The intersections of the US 101 ramps with Monterey Street and the Monterey Street/Luchessa Avenue intersection are signalized. Signalization of the intersection of Monterey Street and Farman Frontage Road is proposed as part of the final phase of the Gilroy Sports Park and was assumed to be completed prior to buildout of the commercial and residential parcels. The methodology presented in the *1994 Highway Capacity Manual* (1994 HCM) for two-way stop-controlled intersections was used to evaluate the unsignalized intersections. Signalized intersection operations were evaluated using the approved CMP methodology. This methodology has also been adopted by the City of Gilroy. The operations of the key intersections were evaluated during the morning (AM) and evening (PM) peak hours under Existing, Background, Project, Cumulative, and General Plan Buildout Conditions. In addition, four key intersections were evaluated for Saturday peak-hour conditions of the sports park.[1]

Using existing counts, estimate traffic projections for approved and pending developments in the area, intersection lane configurations, signal phasings, and the project-generated trips, level of service calculations were conducted for Existing, Background, Project Buildout, Cumulative, and General Plan

[1]The analysis of Saturday peak-hour conditions for these intersections was carried over from the *Gilroy Sports Park EIR TIA* (Fehr & Peers Associates, Inc., January 1999) analysis for consistency purposes.

Buildout Conditions. The results of the level of service calculations are presented in Tables ES—1a and ES-1b.

Intersection Impacts

The level of service calculation results indicate that the project will have a significant adverse impact on four of the seven key intersections:

Luchessa Avenue and Princevalle Street
Luchessa Avenue and Church Street
Monterey Street and Luchessa Avenue
Monterey Street and Farman Frontage Road

Mitigation measures were identified for these intersections. The installation of a traffic signal at the Luchessa Avenue/Princevalle Street intersection would mitigate project impacts to a less-than-significant level. With the existing lane configuration, this intersection is projected to operate at LOS B during the AM, PM, and Saturday peak hour with traffic volumes estimated for Project Conditions.

The installation of a traffic signal and the provision of left-turn pockets on the eastbound and westbound approaches would mitigate project impacts at the Luchessa Avenue/Church Street intersection. With the estimated Projection Conditions volumes and these improvements, this intersection is projected to operate at LOS B during the AM, PM, and Saturday peak hours.

The addition of a second northbound left-turn lane and an exclusive eastbound right-turn lane will improve the operation of the Monterey Street/Luchessa Avenue intersections from LOS F to LOS D during the PM peak hour with estimated Project Conditions volumes. In order to further improve operations to LOS C, either a right-turn arrow would need to be provided for the eastbound right-turn movement (so vehicles in this movement could move while the northbound left-turn movement has a green arrow) or the eastbound right-turn movement would need to be removed from the intersection by a pork chop island and controlled by a yield sign. With these improvements, the intersection is projected to operate at LOS C during both the AM and PM peak hours, thus mitigating the project impact.

A traffic signal will be installed at the intersection of Monterey Street and Farman Frontage Road prior to the completion of Phase IV of the sports park. With installation of the traffic signal, the intersection is projected to operate at LOS C during all three study periods through the final phase of the sports park with the existing lane configuration. With the development of the commercial parcels, additional turn lanes would be needed to serve traffic entering and exiting the retail uses. Two exclusive southbound right-turn lanes, two northbound left-turn lanes and

Table ES-1a

Signalized Intersection Level of Service Summary

Intersection	Peak Hour	Existing		Background		Project Buildout				Cumulative		General Plan Buildout[5]	
		Avg. Delay[1]	LOS [2]	Avg. Delay	LOS	Avg. Delay	LOS	Δ Crit. Delay [3]	Δ Crit. V/C [4]	Avg. Delay	LOS	Avg. Delay	LOS
Luchessa Avenue/ Princevalle Street	AM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	6.9	B+	8.8	B
	PM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5.9	B+	6.3	B+
	Sat	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	5.7	B+	8.1	B
Monterey Street/ Luchessa Avenue	AM	18.7	C	20.2	C	22.3 (17.5)	C (C)	+1.5	+0.089	**>120** (21.2)	**F** (C)	**>120** (21.9)	**F** (C)
	PM	22.7	C	23.1	C-	**>120** (21.4)	**F** (C)	+176.4	+0.630	**>120** (23.0)	**F** (C)	**76.2** (24.9)	**F** (C-)
Monterey Street/ Farman Frontage Road[5]	AM	n/a	n/a	n/a	n/a	20.5 (21.4)	C (C)	n/a	n/a	12.4 (9.8)	B (B)	**51.0** (13.7)	**E** (B-)
	PM	n/a	n/a	n/a	n/a	**>120** (20.8)	**F** (C)	n/a	n/a	**>120** (19.0)	**F** (C)	**>120** (21.8)	**F** (C)
	Sat	n/a	n/a	n/a	n/a	**>120** (21.4)	**F** (C)	n/a	n/a	**>120** (17.5)	**F** (C)	****[7] (24.9)	**F** (C-)
Monterey Street/ US 101 SB Ramps	AM	12.6	B	13.7	B-	14.2	B-	0.0	+0.044	16.0	C+	17.7	C
	PM	13.8	B-	14.9	B-	16.2	C+	+0.4	+0.173	17.2	C	23.9	C-
Monterey Street/ US 101 NB Ramps	AM	17.1	C	20.1	C	19.9	C	-0.3	+0.014	20.9	C	**34.4** (22.9)	**D** (C)
	PM	20.6	C	20.4	C	20.0	C	-1.1	+0.051	21.8	C	**27.2** (24.0)	**D+** (C-)
Santa Teresa Boulevard/ Thomas Road	AM	18.6	C	19.2	C	19.6	C	+1.2	+0.041	25.0	C-	19.9	C
	PM	16.2	C+	17.7	C	18.0	C	+4.2	+0.162	20.4	C	16.5	C+
	Sat	16.3	C+	17.5	C	17.2	C	+5.0	+0.260	18.7	C	17.0	C+

Notes:
1. Whole intersection weighted average stopped delay expressed in seconds per vehicle.
2. Level of service calculations performed using the approved CMP level of service analysis program, TRAFFIX, and the *1985 Highway Capacity Manual* operations analysis methodology for signalized intersections.
3. Change in critical movement delay from Background to Project Conditions.
4. Change in critical volume-to-capacity ratio from Background to Project Conditions.
5. This intersection is controlled by stop signs under Existing and Background Conditions (see Table ES-1b for LOS results for these scenarios). The approved sports park project was conditioned to signalized this intersection prior to completion of Phase IV of the park. Under Project Buildout, Cumulative, and General Plan Buildout Conditions, this intersection is assumed to be signalized and retain the existing lane configuration.
6. General Plan Buildout Conditions include planned General Plan intersection improvements.
7. Volume-to-capacity ratio exceeds 2.0. Average stopped delay cannot be calculated.

LOS deficiencies are indicated in **bold**. Mitigated LOS shown in parentheses.

Table ES-1b

Unsignalized Intersection Level of Service Summary

Scenario	Peak Hour	Intersection		Worst Case Approach	
		Average Delay[1]	LOS [2]	Average Delay	LOS
Luchessa Avenue and Princevalle Street					
Existing Conditions	AM	1.9	A	5.5	A
	PM	1.3	A	6.1	A
	Sat	1.0	A	4.1	A
Background Conditions (Existing Conditions + Approved Projects)	AM	1.3	A	5.9	B
	PM	1.3	A	7.6	B
	Sat	0.9	A	4.7	B
Project Conditions (Existing Conditions + Approved Projects + Project Buildout)	AM	7.0	B	8.6 (7.6)	B (B)
	PM	8.4	B	**65.6** (5.5)	**E** (B+)
	Sat	8.0	B	**61.9** (5.7)	**F** (B+)
Luchessa Avenue and Church Street					
Existing Conditions	AM	1.1	A	5.5	B
	PM	0.9	A	6.8	B
	Sat	0.9	A	4.9	A
Background Conditions (Existing Conditions + Approved Projects)	AM	1.4	A	7.5	B
	PM	1.1	A	10.2	C
	Sat	0.9	A	6.1	B
Project Conditions (Existing Conditions + Approved Projects + Project Buildout)	AM	2.5 (6.4)	A (B)	12.8	C
	PM	**>120** (7.5)	**F** (B)	**>120**	**F**
	Sat	**>120** (8.5)	**F** (B)	**>120**	**F**
Cumulative Conditions (Project Conditions + Other Pending Projects)	AM	**>120** (9.6)	**F** (B)	**>120**	**F**
	PM	**>120** (23.7)	**F** (C-)	**>120**	**F**
	Sat	**>120** (8.9)	**F** (B)	**>120**	**F**
General Plan Buildout Conditions	AM	**>120** (17.3)	**F** (C)	**>120**	**F**
	PM	**>120** (14.0)	**F** (B-)	**>120**	**F**
	Sat	**72.4** (15.6)	**F** (C+)	**>120**	**F**

Table ES-1b(cont.)

Unsignalized Intersection Level of Service Summary

Scenario	Peak Hour	Intersection		Worst Case Approach	
		Average Delay[1]	LOS [2]	Average Delay	LOS
Monterey Street and Farman Frontage Road[3]					
Existing Conditions	AM	0.5	A	10.6	C
	PM	0.5	A	24.6	D
	Sat	0.4	A	10.0	B
Background Conditions (Existing Conditions + Approved Projects)	AM	0.5	A	13.0	C
	PM	0.9	A	**60.1**	**F**
	Sat	0.4	A	14.6	C

Notes: [1] Average total intersection delay for unsignalized intersection, expressed in seconds per vehicle.
[2] LOS calculations performed using the CMP level of service analysis program, TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections.
[3] The approved sports park project was conditioned to signalized this intersection prior to completion of Phase IV of the park. The results of the analysis contained in this report indicate this intersection should be signalized prior to completion of Phase III of the sports park (see Table ES-1a for signalized intersection operations).

LOS deficiencies are indicated in **bold**. Mitigated LOS shown in parentheses.

widening of the eastbound approach would be needed to serve the project volume. In addition, right-turn arrows would need to be provided for the eastbound and southbound right-turn movements to provide LOS C intersection operations during all three study periods. This lane configuration will require split phase operation of the eastbound and westbound approaches and will require widening of Farman Frontage Road. Some realignment of Farman Frontage Road may be required to provide adequate turning radii as it approaches its intersection with Monterey Street. The feasibility of this improvement is subject to more detailed engineering studies. Without implementation of all the mitigation measures, the project's impact would not be fully mitigated.

The General Plan Buildout scenario includes intersection improvements that are included in the City of Gilroy General Plan. With these improvements, five of the seven key intersections are projected to operate at deficient levels during at least one peak hour with the estimated General Plan Buildout traffic volumes. The intersections that are projected to operate at unacceptable levels under General Plan Buildout Conditions were also evaluated with the improvements identified to mitigate project impacts. The improvements recommended to mitigate project impacts at the two unsignalized intersections (Luchessa Avenue/Princevalle Street and Luchessa Avenue/Church Street), in combination with the General Plan improvements, would restore intersection operations to acceptable levels.

Additional improvements would be required at the intersections of Monterey Street with Luchessa Avenue and with Farman Frontage Road. To attained LOS C operations, the provision of a northbound free right-turn and an overlap phase (right-turn arrow) for the westbound right-turn movement would be needed at the Monterey Street/Luchessa Avenue intersection. Monterey Street/Farman Frontage Road intersection operations are projected to improve to LOS C during the AM, PM, and Saturday peak hours with the identified project mitigation.

The intersection of Monterey Street with the northbound US 101 ramps is projected to operate at an unacceptable LOS D during the AM and PM peak hours with the estimated General Plan Buildout traffic volumes. The proposed projected is estimated to have a less-than-significant impact on this intersection, and therefore, no project mitigation measures were identified at this location. Intersection operations under General Plan Buildout Conditions would be improved to LOS C by re-striping the eastbound approach (the US 101 off-ramp) to permit left turns from the existing through only lane. The resulting lane configuration on this approach would be two exclusive left-turn lanes, one shared through and left-turn lane, and one right-turn lane. Intersection operations are projected to be LOS C during both the AM and PM peak hours with this striping revision. Alternatively, the City is proposing to lower the LOS standard for the US 101 ramp intersections with Monterey Street to LOS D with the proposed General Plan. With this LOS standard change, this intersection would operate at acceptable levels of service without the striping revision.

Roadway Segment Impacts

Roadway segment operations are summarized in Table ES-2. The proposed project is estimated to have a significant impact on one of the four segments. The operation of the segment of Luchessa Avenue between Princevalle Street and Monterey Street is projected to deteriorate from LOS A to LOS F with the addition of project traffic. The remaining segments are projected to continue to operate at LOS C or better.

Widening the segment of Luchessa Avenue between Monterey Street and Princevalle Street from two to four lanes would provide adequate capacity to serve the estimated project buildout traffic volumes and mitigate the project impact. The City's General Plan includes widening of Luchessa Avenue between Chestnut Street and Thomas Road (including the bridge over Uvas Creek) to six lanes. An ultimate roadway with of approximately 116 to 120 feet is anticipated for Luchessa Avenue.

Two-Lane Highway Impacts

The impact of the proposed project on State Route 152 (Pacheco Pass Highway), east of US 101, was evaluated using the methodology presented in the 1994 *Highway Capacity Manual*. The results indicate that the project would not have a significant impact on the segment of SR 152

Table ES-2

Roadway Segment Level of Service Summary

Segment	Roadway Type[1,2]	LOS C Volume Threshold [2]	Existing		Background		Project		Cumulative		General Plan Buildout	
			Weekday Daily Volume	LOS	Weekday Daily Volume	LOS	Weekday Daily Volume	LOS	Weekday Daily Volume	LOS	Weekday Daily Volume	LOS
Luchessa Avenue, Thomas Road to Princevalle St.	2-Lane Arterial (6-Lane Divided Arterial)	14,500 (43,000)	5,485	A	7,320	A	13,365	C	**15,430**	**D** (A)	16,000	A
Luchessa Avenue, Princevalle St. to Monterey St.	2-Lane Arterial (6-Lane Divided Arterial)	14,500 (43,000)	6,030	A	8,035	A	**16,965**	E (A)	**20,575**	**F** (A)	22,000	A
Monterey Street, Tenth St. to Luchessa Ave.	4-Lane Divided Arterial (6-Lane Divided Arterial)	29,000 (43,000)	7,835	A	9,765	A	13,005	A	15,860	A	23,000	A
Monterey Street, Luchessa Ave to US 101	4-Lane Divided Arterial (6-Lane Divided Arterial)	29,000 (43,000)	12,970	A	14,550	A	28,060	C	**31,800**	**D** (A)	36,000	B

Note: [1] Roadway type of Luchessa Avenue based on classification in 2001 City of Gilroy Traffic Monitoring Program reports. Monterey Street roadway type based on field observations.
[2] Roadway types and LOS C threshold volumes in parentheses are assumptions for General Plan Buildout Conditions.
LOS deficiencies are indicated in **bold** Mitigated LOS shown in parentheses.

between Llagas Creek and Frazier Lake Road. SR 152 is currently being widened between US 101 and Llagas Creek. This segment would operate as a four-lane arterial with these improvements, which include roadway widening, intersection improvements, and a traffic signal at Gilroy Foods.

Freeway Segment Impacts

Potential project impacts on area freeway segments were evaluated using the CMP methodology. The key freeway segments are projected to operate at LOS B and C during the PM peak hour with the addition of project-generated traffic. Therefore, the project is estimated to have a less-than-significant impact on the nearby segments of US 101 according to the criteria established in the Santa Clara County CMP.

Queuing Analysis

The queuing analysis indicated that the estimated queues for the northbound left-turn movement at Monterey Street and Luchessa Avenue and the northbound left-turn movement at Monterey Street and Farman Frontage Road would extend past the existing left-turn storage pockets for the under Project Conditions. Implementation of the project mitigation measures for these two intersections would accommodate the expected queues.

Other Issues

Site access, on-site circulation, and parking for the sports park were reviewed in the January 1999 TIA for that project. The review was updated in the context of the current project description (with development of the USA amendment parcels). The site plan for the proposed residential development was review in terms of site access and a cursory review of on-site circulation was conducted. General access issues related to development on the commercial parcels were also reviewed.

Sports Park

Site access, on-site circulation and parking were assessed for the sports park. The proposed parking supply of 1,049 was found to be adequate to serve the estimated demand. However, a shortfall is projected to occur after the completion of Phase V. It is recommended that 180 of the 298 parking spaces that will be constructed with Phase VI be constructed instead with Phase V to offset the projected shortfall.

Sports park site access was found to be adequate to serve sports park traffic, with sufficient storage provided for queued vehicles between Farman Frontage Road and the main entry building, where a parking fee will be collected. It was recommended that the intersection of the sports park driveway

with Farman Frontage Road be monitored for possible traffic signal installation after buildout of the commercial parcels. The intersection of the sports park driveway should be designed and constructed to accommodate the possible signal installation.

On-site circulation was reviewed and generally found to be adequate. The following recommendations were made:

- The outbound lanes of the entry road near Farman Frontage Road should be narrowed to one lane with paint to allow two outbound lanes (with park personnel directing traffic), if needed.

- All-way stop sign control is recommended at the intersection of the entry road and the main north-south road. All-way stop sign control will provide safer conditions for pedestrians crossing this intersection.

- It is recommended that the first driveway on the entrance road (closest to Farman Frontage Road) be widened to allow both inbound and outbound traffic and the landscape median along the entry road be cut back to allow left turns from this parking area onto the entry road. Currently, the on-site traffic is concentrated at the intersection of the entry road and the main north-south circulation road. Allowing left turns out of the eastern most driveway will diffuse some of this traffic. Landscaping in the median should be low (two to 2.5 feet in height) or taller trees with thin trunks, which should be pruned to maintain adequate sight distance.

- The provision of an additional north-south circulation aisle in the western most parking area is recommended to break up the long rows of parking spaces. In addition, the parking bays and circulation aisles should be extended eastward, eliminating the isolated landscaped barrier at the east end of the parking area.

Recommendations were made in regard to other improvements proposed as part of the sports park project, including:

- A crosswalk across Monterey Street at Farman Frontage Road should not be provided until the traffic signal is installed at this intersection.

- The proposed Farman Frontage Road bus stop should be designed to VTA standards. Pedestrian access should be provided from the bus stop to along Farman Frontage Road that connects to the internal pedestrian paths.

- The proposed sidewalk along the west side of Monterey Street should connect to signalized intersection of Luchessa Avenue and Monterey Street. It is recommended that the sidewalks

along Monterey Street be installed when the Monterey Street/Farman Frontage Road intersection is signalized.

- Due to travel speeds along Luchessa Avenue (in excess of 40 mph), a crosswalk is not recommended without the protection of a traffic signal with pedestrian heads for pedestrian crossing or all-way stop sign control (stop signs on all three intersection approaches). The recommended pedestrian and bicycle facility is the connection of the existing trail north of Luchessa Avenue with the proposed trail to the south via the future under-crossing of the Luchessa Avenue bridge. It is recommended that this location be monitored for both vehicular and pedestrian/bicycle volumes, and an all-way stop or traffic signals (with pedestrian heads) be installed if warrant requirements are met. (Signalization of this intersection is recommended as mitigation under Project Buildout Conditions.)

Commercial and Residential Parcels

Specific commercial and residential developments are not proposed at this time, and site plans have not been developed for the corresponding parcels. Therefore, only a general review of site access was conducted. Detailed reviews of the site plans should be conducted when specific projects are is proposed to ensure adequate access, circulation, and parking are provided.

Direct access to the commercial parcels was assumed to be provided via one right-turn driveway on Monterey Street and one full access driveway on Farman Frontage Road serving the northern commercial parcels (those located north of the sports park entrance) and at least one full access driveway on Farman Frontage Road serving the southern commercial parcels.

Based on the projected traffic volumes, a southbound right-turn lane is recommended to serve the traffic entering the northern commercial parcels via the Monterey Street driveway. It was noted that the estimated queues on the southbound approach of the Monterey Street/Farman Frontage Road intersection may at times extend back past this driveway blocking the exiting vehicles. This could result in additional traffic being added to Farman Frontage Road and the west leg of the Farman Frontage Road/Monterey Street intersection.

The northern commercial driveway on Farman Frontage Road was assumed to be controlled by a stop sign on the driveway approach and is projected to operate at an acceptable level during the AM peak hour and unacceptable levels during the PM and Saturday peak hours. The Caltrans Peak Hour Volume warrant requirements for traffic signal installation are satisfied with volumes projected for the PM and Saturday peak hours with project buildout. However, the proximity of this driveway to the Farman Frontage Road/Monterey Street intersection and the sports park driveway may make signalization infeasible. As discussed in regard to improvements at the Monterey Street/Farman

Frontage Road intersection and the sports park driveway, it may be necessary to realign Farman Frontage Road. This realignment may provide opportunities for improved access to the commercial center.

The conflicting traffic at the intersection of the southern commercial driveway with Farman Frontage Road is projected to be minimal, and the driveway is projected to operate at acceptable levels during all study scenarios. However, one access point may not be sufficient for emergency access. When a site plan is proposed, it should be reviewed to ensure adequate emergency access is provided.

Direct access to the residential parcels was assumed to be provided via two full access driveways, one at the intersection of Church Street and Luchessa Avenue, the other on Luchessa Avenue east of Church Street, and a right-turn only driveway on Monterey Street east of Luchessa Avenue. Based on the projected traffic volumes, the assumed site access would be adequate.

CHAPTER 1 - INTRODUCTION

This report presents the results of the Transportation Impact Analysis (TIA) conducted for the Gilroy Sports Park and proposed Urban Services Area (USA) amendment in Gilroy, California. A TIA was prepared in January 1999 for the sports park and an update was prepared in January 2000 to include the USA amendment, with maximum allowable development on the amendment commercial parcels and a specific residential development proposed for the remaining amendment parcels. Since that time, the proposed residential development has been withdrawn. This analysis evaluates impacts of the Sports Park and the USA amendment with maximum development on both the commercial and residential parcels.

The project site is located on the west side of Monterey Street, south of Luchessa Avenue (formerly Thomas Road), and is bounded on the west by Uvas Creek and on the south by Uvas Creek and Farman Lane. The site location and surrounding roadway network are presented on Figure 1.

The proposed project includes three components: a sports park (approximately 78 acres), residential uses (approximately 28 acres), and commercial uses (approximately 27 acres). The locations of the proposed land uses are illustrated on Figure 2.

The Gilroy Sports Park will contain 10 softball fields, three baseball fields, seven soccer fields (which are overlaid on the ballfields), a commercial recreation area, and a park/casual recreation area. The commercial recreation area will house a community meeting room and has the potential to house additional indoor athletic activities (roller hockey, indoor soccer, and BMX). The park area includes picnic areas, children's play areas, two sand volleyball courts, six bocce ball courts, and six horseshoe pits. The sports parks's Master Plan indicates that it will be developed in nine phases, as follows:

Phase I - Utility infrastructure, entrance, corporation yard, and Uvas Creek Trail extension (rough grading)

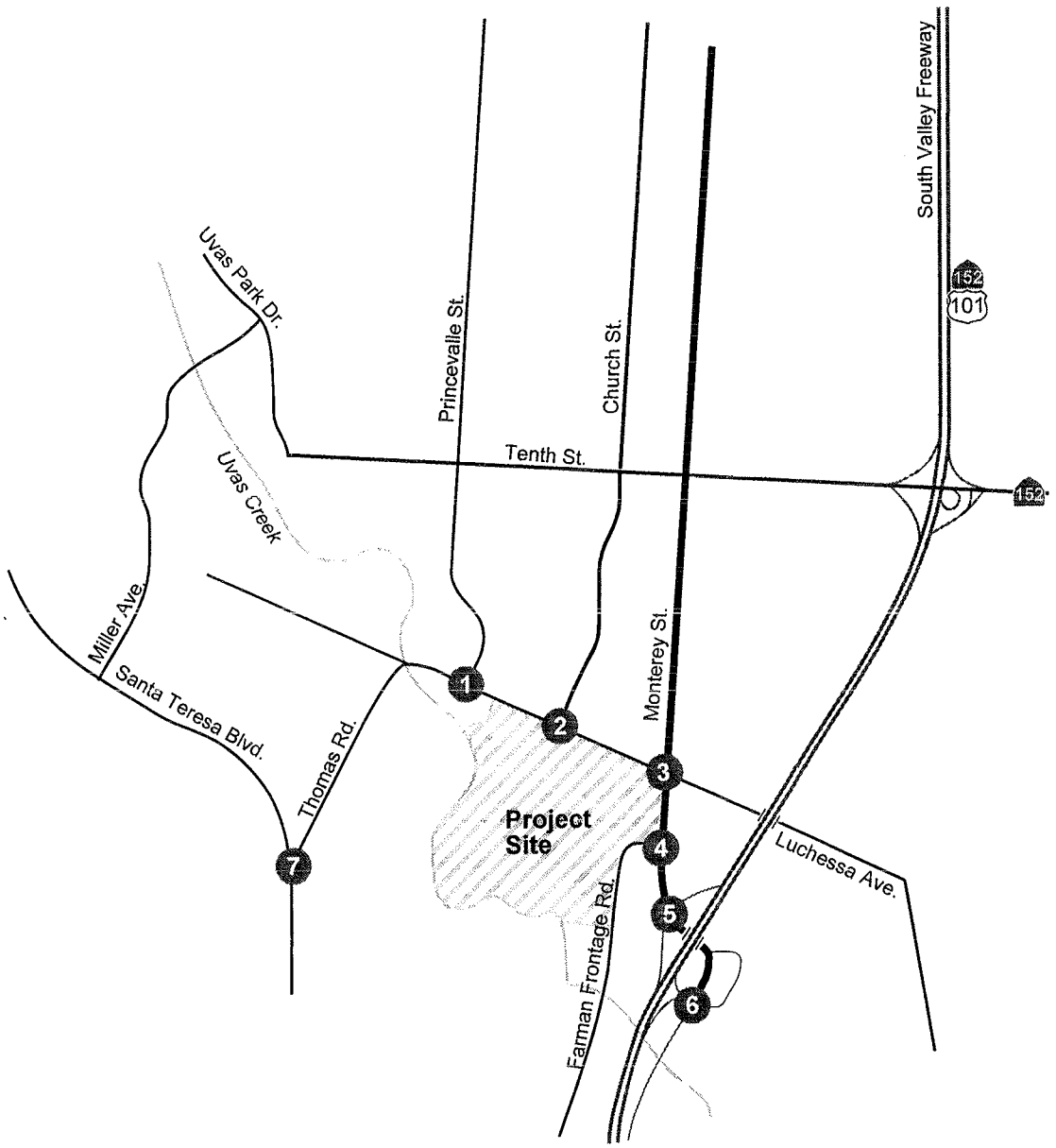
Phase II - Two premier Little League fields (over-laid with one soccer field), parking, and Uvas Creek Trail extension

Phase III - One ball field (over-laid with one soccer field) and commercial recreation

Phase IV- North multi-use field area and parking (four softball fields over-laid with two soccer fields); signalization of the Monterey Street/Farman Frontage Road intersection (a Condition of Approval of the currently approved sports park project)

Phase V- South multi-use field area and parking (four softball fields over-laid with two soccer fields)

Phase VI- One premier softball/baseball field (overlaid with one soccer field)



Key:

1 Study Intersection

N

Not to Scale

Figure 1 | **SITE LOCATION**

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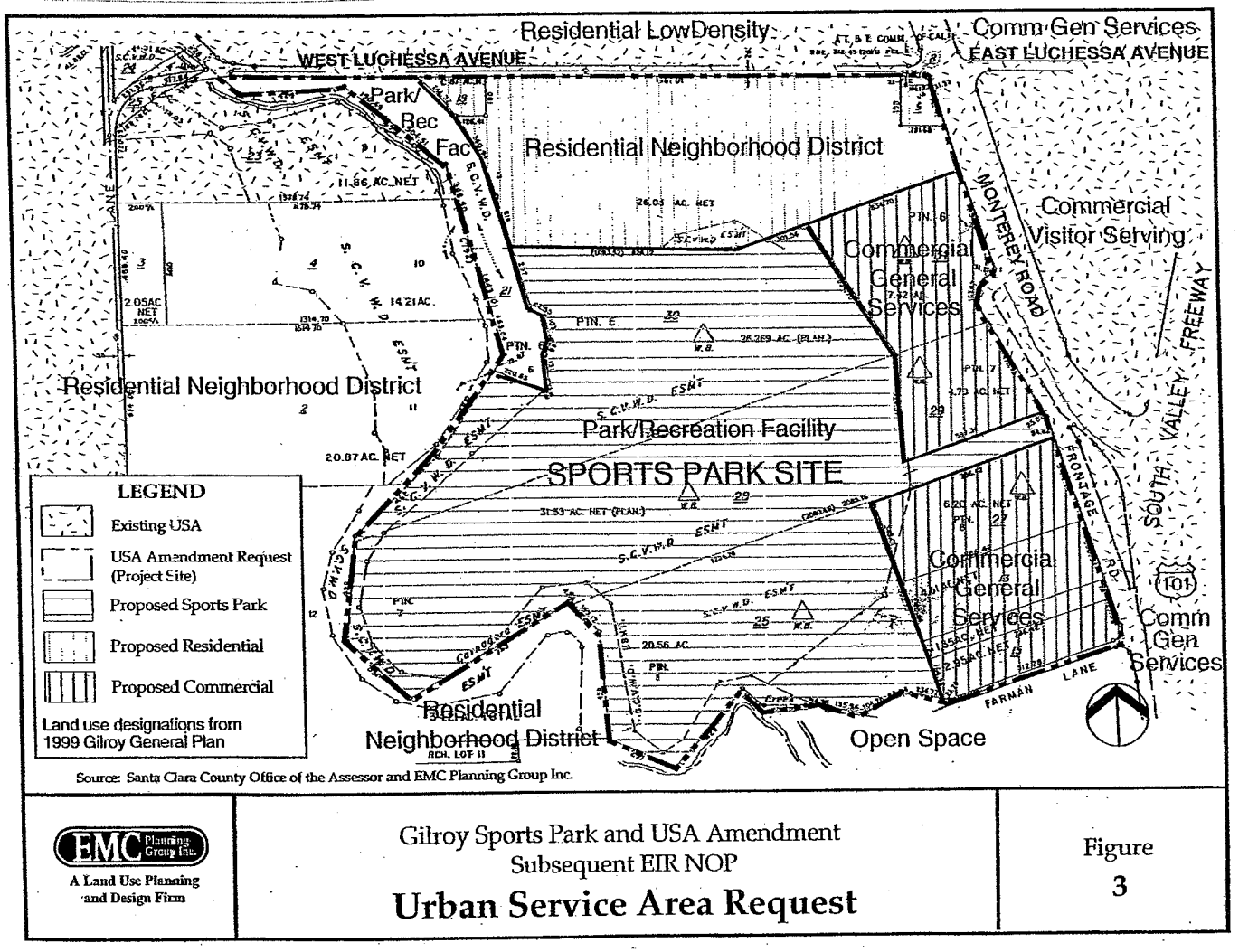

Figure 2 — **PROPOSED LAND USES**

425-12-01

- Phase VII- Informal recreation area (park area with volley ball and bocce ball courts and horseshoe pits)
- Phase VIII- Farman Frontage Road improvements
- Phase IX- Uvas Creek Trail extension to Gavilan College

The sports park will be constructed over twenty years, with the first ballfields ready for use in Spring 2002. Direct access to the sports park site will be provided via a main entryway on Farman Frontage Road. The sports park site plan is shown on Figure 3.

There is no specific development proposed for the commercial or residential parcels. The commerical parcels will be zoned Commercial General Services, while the residential parcels will be zoned Neighborhood District. Per City staff direction, this analysis assumed the development of approximately 590,000 square feet (s.f.) of retail space on the commercial parcels and 147 units on the residential parcels. The commercial parcels front on Monterey Street and Farman Frontage Road. Direct access was assumed to be provided via one right-turn driveway on Monterey Street and one full access driveway on Farman Frontage Road serving the northern commercial parcels (those located north of the sports park entrance) and at least one full access driveway on Farman Frontage Road serving the southern commercial parcels. The residential parcels are located on the south side of Luchessa Avenue between Monterey Street and Uvas Creek. Direct access to the residential parcels was assumed to be provided by new public streets that will intersect with Luchessa Avenue at two locations and with Monterey Street at one location. The Monterey Street intersection will be restricted to right-turns only (due to the existing raised median on Monterey Street).

The purpose of the analysis is to identify the potential impacts of the proposed development on the transportation system in the vicinity of the site. The impacts of the proposed project were estimated following the guidelines set forth by the City of Gilroy and the Santa Clara Valley Transportation Authority (VTA), which is the congestion management agency for Santa Clara County. Seven key intersections, four roadway segments, one two-lane highway segment, and two freeway segments were evaluated:

Intersections

1. Luchessa Avenue at Princevalle Street*
2. Luchessa Avenue at Church Street*
3. Monterey Street and Luchessa Avenue
4. Monterey Street at Farman Frontage Road*
5. Monterey Street and Southbound US 101 Ramps
6. Monterey Street and Northbound US 101 Ramps
7. Santa Teresa Boulevard and Thomas Road*

* Intersections also analyzed during the Saturday peak hour.

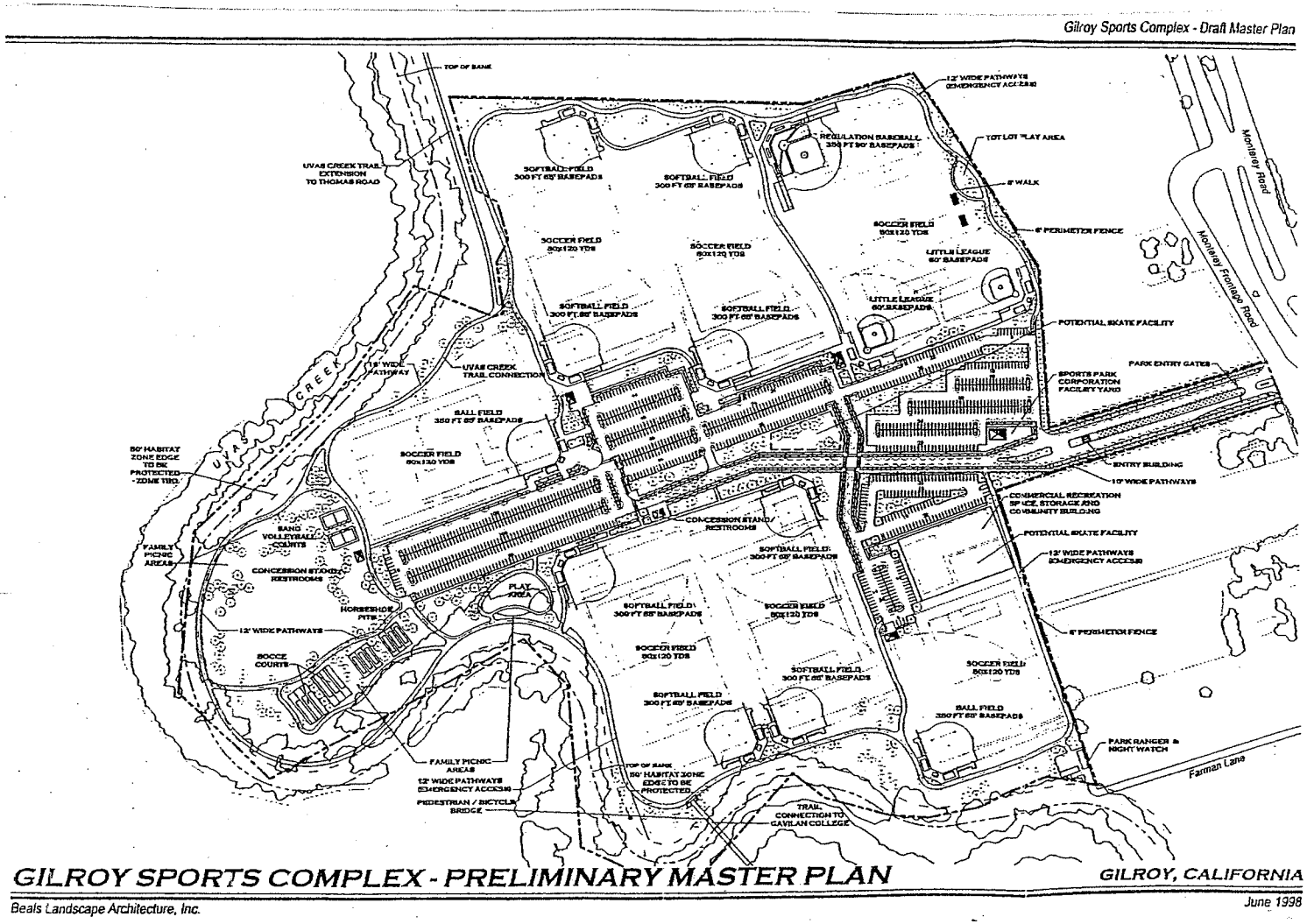

Figure 3	SPORTS PARK SITE PLAN	
425-13-01		

Roadway Segments

1. Luchessa Avenue, between Thomas Road and Princevalle Street
2. Luchessa Avenue, between Princevalle Street and Monterey Street
3. Monterey Street, between Tenth Street and Luchessa Avenue
4. Monterey Street, between Luchessa Avenue and US 101

Two-Lane Highway Segment

1. SR 152, between US 101 and Frazier Lake Road

Freeway Segments

1. US 101, between Leavesley Road and Monterey Street
2. US 101, between Monterey Street and State Route 25 (SR 25)

The operations of the key intersections, two-lane highway segment, and freeway segments were evaluated during the morning (AM) and evening (PM) peak hours (the time periods when traffic volumes on the surrounding roadways are highest). A subset of intersections (denoted with an asterisk above) was also evaluated during the Saturday peak hour (the time period when traffic generated by the sports park will be highest). The roadway segments were evaluated using weekday daily volumes. The intersections, roadway segments, and two-lane highway segment were evaluated for the following scenarios:

Scenario 1: *Existing Conditions.* Existing volumes obtained from counts, representing peak one-hour traffic conditions during the morning and evening commute periods and on a Saturday afternoon.

Scenario 2: *Background Conditions.* Existing peak-hour volumes plus traffic from approved but not yet constructed developments in the area.

Scenario 3a-g: *Project Conditions.* Background peak-hour volumes plus project-generated traffic estimated for the proposed development. The project was evaluated for six levels of sports park development and buildout of the project (including development on the residential and commercial parcels).

Scenario 4: *Cumulative Conditions.* Traffic volumes estimated for conditions with buildout of the project (Scenario 3g) plus traffic associated with other pending (proposed but not approved) developments.

Scenario 5: *General Plan Buildout Conditions.* Traffic volumes projected for the buildout of the General Plan.

Potential project impacts on the adjacent freeway segments were evaluated following CMP guidelines. Site access, on-site circulation, and parking were reviewed for the sports park.

This report is divided into eight chapters. Chapter 2 describes Existing Conditions regarding roadway facilities, transit service, bicycle and pedestrian facilities, traffic volumes, and traffic operations of the study intersections. Chapter 3 describes the approved developments in the area and traffic operations for Background Conditions. Chapter 4 describes the methodology used to estimate the project traffic and its impacts on the transportation system (intersections and roadway and freeway segments). Cumulative Conditions and General Plan Buildout Conditions are presented in Chapters 5 and 6, respectively. Site access, on-site circulation, and parking are discussed in Chapter 7. Chapter 8 presents the conclusions of this transportation impact analysis.

CHAPTER 2 - EXISTING CONDITIONS

This chapter provides a description of Existing Conditions in terms of the roadway facilities, traffic volumes, and intersection operations.

Roadway Network

Regional access to the project site is provided by US 101 and State Route 152 (SR 152), while local access is provided by Monterey Street, Farman Frontage Road, Luchessa Avenue, Thomas Road, Princevalle Street, and Church Street:

US 101 provides access to the project site via an interchange at Monterey Street. North of its interchange with Monterey Street, US 101 is a six-lane freeway, narrowing to four lanes north of Cochrane Road. South of Monterey Street, US 101 becomes a four-lane conventional highway. US 101 extends northward through San Jose and San Francisco and southward through the California Central Coast.

SR 152 (Pacheco Pass Highway) connects US 101 to Interstate 5 and Highway 99 in the California Central Valley. This segment of SR 152 is two to four lanes wide. SR 152 is also designated on portions of US 101, Leavesley Road, and Monterey Street. West of Monterey Street, SR 152 extends westward along First Street.

Monterey Street is, generally, a four-lane arterial through the City of Gilroy. Through downtown Gilroy (between Third and Seventh Streets), Monterey Street narrows to two travel lanes, with angled parking on the east site of the street separated from northbound through traffic by a raised median. North of the City Limits, Monterey Street becomes Monterey Road, a rural highway with four travel lanes and a center turn lane. Monterey Road continues northward into San Jose. South of its interchange with US 101, Monterey Street becomes Bolsa Road. Near the project site, the speed limit on Monterey Street is 50 miles per hour (mph).

Farman Frontage Road (formerly Monterey Frontage Road) is a two-lane road that extends southward from Monterey Street, near the Monterey Street/US 101 interchange, ending in a cul-de-sac south of the project site. Farman Frontage Road is a frontage road located along the west side of US 101 that provides direct access to the project site (and other properties).

Santa Teresa Boulevard is a two-lane, north-south arterial. Santa Teresa Boulevard extends north from Castro Valley Road in the south part of Gilroy to Morgan Hill.

Luchessa Avenue is a two- to four-lane roadway, which extends eastward from Greenfield Drive and terminates east of US 101, east of its intersection with Rossi Lane. The segment of Luchessa Avenue

between Thomas Road and Monterey Street was recently renamed from Thomas Road to Luchessa Avenue. Near the project site, Luchessa Avenue is two lanes wide, and the speed limit is 40 mph.

Thomas Road is a two-lane roadway that extends northward from Santa Teresa Boulevard to its all-way stop controlled intersection with Luchessa Avenue.

Princevalle Street is a two-lane residential collector street that extends southward from First Street to Luchessa Avenue. It has a posted speed limit of 30 mph.

Church Street is a two-lane street in the vicinity of the project site. Church Street extends northward from Luchessa Avenue through downtown Gilroy to north of Farrell Avenue. Church Street, between Luchessa Avenue and Farrell Avenue, is designated an arterial in the current General Plan and has a posted speed limit of 35 mph.

Transit Service

Bus service in Santa Clara County is operated by the Santa Clara Valley Transportation Authority (VTA). Currently, there is one bus route operating within one-half mile of the project site, Route 68:

Route 68 operates along Princevalle Street, north of Luchessa Avenue and along Luchessa Avenue and Thomas Road, west of Princevalle Street. Route 68 provides service between San Jose Diridon CalTrain Station and Gavilan College in Gilroy. Hours of operation are 4:30 am to 1:00 am on weekdays and 6:00 am to 12:30 am on weekends. Route 68 operates on a 15- minute headway during the commute hours and a 30- to 60-minute headway during other hours.

Commuter rail service (CalTrain) is provided from Gilroy to San Francisco by the Joint Powers Board. CalTrain provides frequent train service between San Jose and San Francisco seven days a week. Extended service is provided to Morgan Hill and Gilroy during the commute hours only. The Gilroy CalTrain station is located east of Monterey Street between Seventh and Ninth Streets.

Pedestrian and Bicycle Facilities

Pedestrian facilities comprise sidewalks, crosswalks, and pedestrian signals. Near the site, there are generally no pedestrian facilities. A sidewalk is provided along the north side of Luchessa Avenue between Monterey Street and Princevalle Street. Sidewalks are not provided along Farman Frontage Road or Monterey Street.

Bicycle facilities comprise bike paths, bike lanes, and bike routes. Bike paths are paved trails that are separated from the roadways. Bike lanes are lanes on roadways that are designated for use by bicycles by striping, pavement legends, and signs. Bike routes are roadways that are designated for bicycle use

with signs. Currently, there is a bike path along the eastern side of Uvas Creek between Luchessa Avenue and Westwood Avenue, north of the site. Bike lanes are designated on Princevalle Street between Luchessa Avenue and Sixth Street. The Gilroy Sports Park will extend the Uvas Creek Trail southward to Gavilan College.

Existing Intersection Volumes and Lane Configurations

The operations of the key intersections were evaluated for morning (AM) and evening (PM) peak-hour traffic conditions. In addition, four of the key intersections were evaluated for Saturday peak-hour conditions. Peak conditions generally occur during the morning and evening commute periods between 7:00 and 9:00 am and 4:00 to 6:00 pm, respectively, on a weekday. The Saturday peak conditions generally occur between noon and 2:00 pm, based on information provided by City staff (machine counts conducted on Luchessa Avenue in October 1998). Intersection operations were evaluated for the highest one-hour volume counted during each of these periods. New peak-hour traffic volumes were obtained for all of the key intersections during November and December 2001.

Figure 4 shows the existing AM, PM, and Saturday peak-hour turning movement volumes at the key intersections. The intersection lane configurations are presented on Figure 5.

Level of Service Methodologies

The operations of roadway facilities are described with the term *level of service*. Level of Service 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, as the best operating conditions, to LOS F, or the worst operation conditions. LOS E represents "at-capacity" operations. When volumes exceed capacity, stop-and-go conditions result, and operations are designated as LOS F. The City of Gilroy's standard for intersections and roadway segments is Level of Service C.

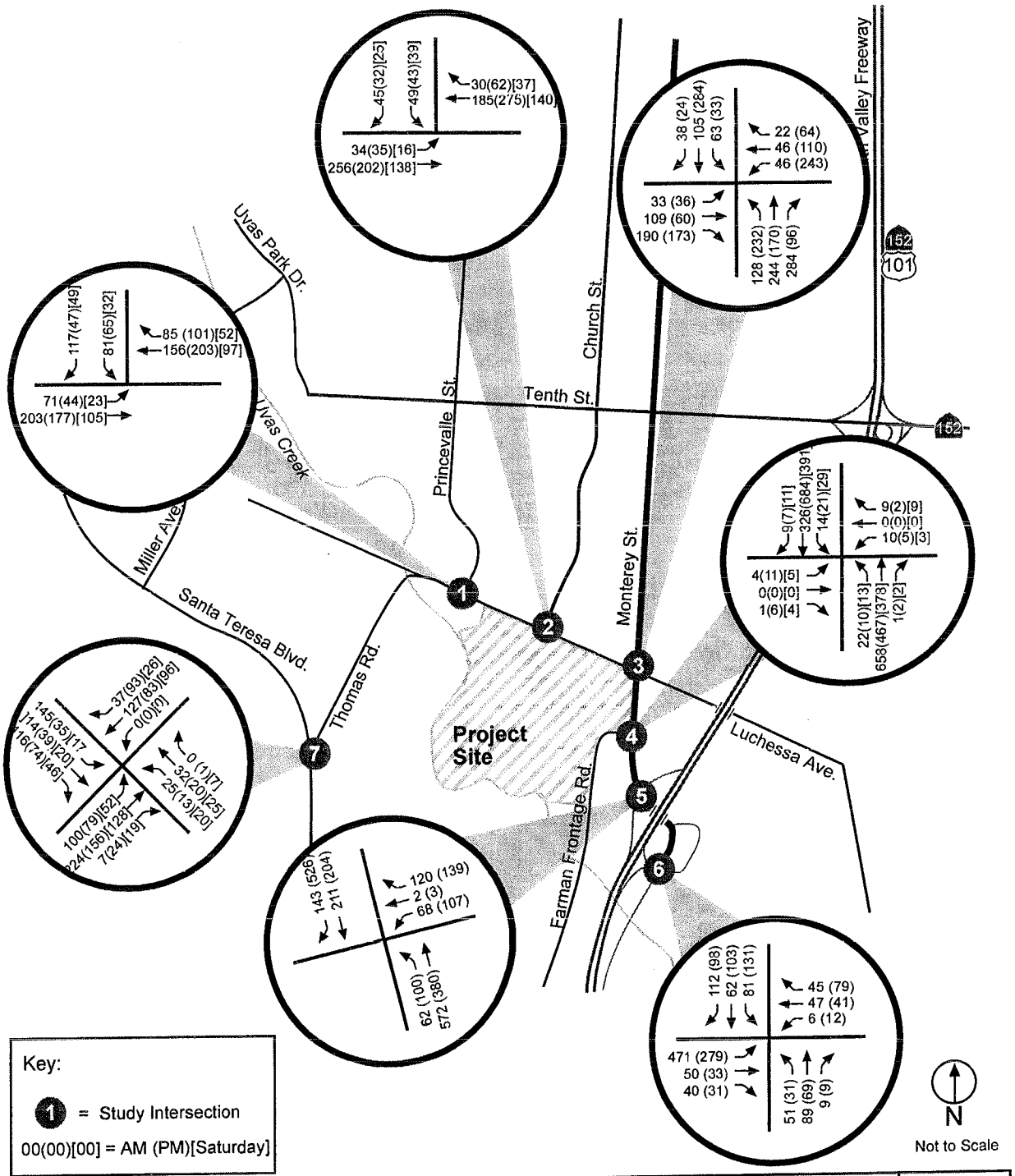

Figure 4 — **EXISTING PEAK-HOUR TRAFFIC VOLUMES**

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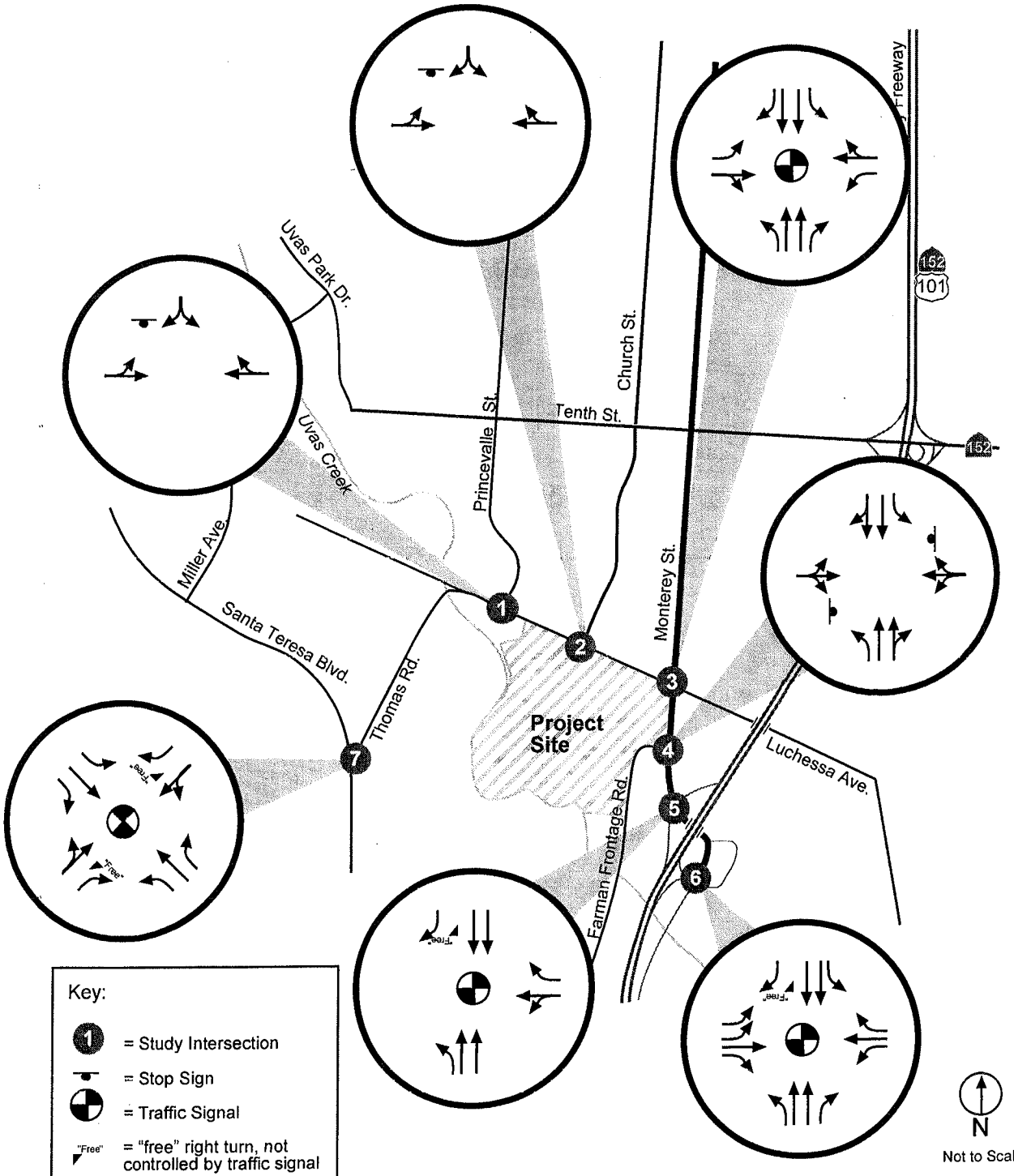

Figure 5
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INTERSECTION LANE CONFIGURATIONS AND TRAFFIC CONTROL DEVICES

LOS D or better is an acceptable operating level for the worst case movement/approach at an unsignalized intersection. The CMP standard for freeway segments is LOS E.

Intersections

The level of service calculation methodology for intersections is dependent on the type of traffic control device (traffic signals or stop signs). Four of the key intersections are currently controlled by traffic signals: Monterey Street and Luchessa Avenue, Monterey Street and Southbound US 101 Ramps, Monterey Street and Northbound US 101 Ramps, and Santa Teresa Boulevard and Thomas Road. The remaining intersections are T-intersections that are controlled by stop signs on one approach.

The intersection level of service methodology used in this analysis to evaluate the signalized intersections is the approved VTA method. This method evaluates an intersection's operations based on the average stopped vehicular delay calculated using the method described in Chapter 9 of the *1985 Highway Capacity Manual* (HCM) (Special Report 209, Transportation Research Board) with saturation flow rates adjusted to reflect local conditions. The average stopped delay for signalized intersections is calculated using the TRAFFIX analysis software and is correlated to a level of service designation as shown in Table 1.

Intersection levels of service were calculated using the methodology presented in Chapter 10 of the *1994 Highway Capacity Manual* for two-way stop-controlled intersections. This methodology evaluates an intersection's operation based on the total average delay at an intersection. The total delay for the unsignalized intersections was calculated using TRAFFIX analysis software and then correlated to a level of service. The level of service thresholds for two-way stop-controlled intersections are presented in Table 2.

Roadway Segments

Roadway segment operations were evaluated by comparing the measured traffic volume to LOS C volume thresholds. The thresholds used in the analysis were established in the 1997 City of Gilroy Traffic Monitoring Program and used in city monitoring programs in subsequent years. The threshold volumes are based on the roadway type and number of lanes (see Table 3). These thresholds are approximate and serve as a general guide as to whether existing (or projected) volumes exceed roadway capacity.

Table 1

Signalized Intersection Level of Service Definitions Using Average Stopped Vehicular Delay

Level of Service	Average Stopped Delay (Seconds Per Vehicle)	Description
A	≤ 5.0	Operations with very low delay occurring with favorable progression and/or short cycle length.
B+ B B-	5.1 to 7.0 7.1 to 13.0 13.1 to 15.0	Operations with low delay occurring with good progression and/or short cycle lengths.
C+ C C-	15.1 to 17.0 17.1 to 23.0 23.1 to 25.0	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.
D+ D D-	25.1 to 28.0 28.1 to 37.0 37.1 to 44.0	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.
E+ E E-	40.1 to 44.0 44.1 to 56.0 56.1 to 60.0	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.
F	> 60.0	Operation with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.

Source: VTA's CMP Transportation Impact Analysis Guidelines, May 1998 and *Highway Capacity Manual*, Special Report 209, Transportation Research Board, 1994.

Table 2

Two-Way Stop-Controlled Intersection Level of Service Definitions Using Average Total Vehicular Delay

Level of Service	Average Total Delay (Seconds Per Vehicle)
A	≤ 5.0
B	5.1 to 10.0
C	10.1 to 20.0
D	20.1 to 30.0
E	30.1 to 45.0
F	> 45.0

Source: Transportation Research Board, *Highway Capacity Manual*, Special Report 209, 1994. p.10-12.

Two-Lane Highway Segments

SR 152 is a rural highway on the CMP roadway network. It was therefore evaluated using the methodology presented in Chapter 8 of the 1994 *Highway Capacity Manual*, as required by the CMP. The level of service of the two-lane highway segment was determined by comparing the actual measured flow rates against calculated threshold maximum flow rates for LOS A through LOS E. These service flow rates were calculated by adjusting the ideal capacity for a two-lane rural highway segment (2,800 vehicles per hour) to account for directional distribution of traffic, percentage of heavy vehicles, lane widths, shoulder widths, type of terrain, and the maximum volume-to-capacity ratio for the segment based percentage of no passing zones and terrain.

Freeway Segments

Freeway segments were evaluated using the methodology required by the VTA. The VTA's analysis procedure is based on the density of the traffic flow using methods described in the *1994 Highway Capacity Manual*. Density is expressed in passenger cars per mile per lane. The CMP freeway segment level of service criteria are shown in Table 4. These criteria are based on the 1994 HCM level of service criteria with adjustments to reflect local (Santa Clara County) conditions.

Table 3

Level of Service Threshold Volumes For Various Roadway Types [1]

Roadway Type	Maximum Daily Volume (both directions)				
	LOS A	LOS B	LOS C	LOS D	LOS E
8-Lane Freeway	51,000	79,000	112,000	136,000	146,000
6-Lane Freeway	39,000	59,000	85,000	102,000	110,000
8-Lane Expressway	35,000	54,000	75,000	90,000	98,000
6-Lane Expressway	28,000	42,000	56,000	67,000	74,000
4-Lane Freeway	26,000	39,000	57,000	68,000	73,000
8-Lane Divided Arterial (with left-turn lanes)	40,000	47,000	54,000	61,000	68,000
6-Lane Divided Arterial (with left-turn lanes)	32,000	38,000	43,000	49,000	54,000
4-Lane Expressway	18,000	27,000	36,000	45,000	50,000
4-Lane Divided Arterial (with left-turn lane)	22,000	25,000	29,000	32,500	36,000
4-Lane Undivided Arterial (no left-turn lane)	16,000	19,000	22,000	24,000	27,000
2-Lane Rural Highway	4,000	8,000	12,000	17,000	25,000
2-Lane Arterial (with left-turn lane)	11,000	12,500	14,500	16,000	18,000
2-Lane Collector	6,000	7,500	9,000	10,500	12,000
2-Lane Local Street [2]	1,200	1,400	1,600	1,800	2,000
1-Lane Freeway Ramp [3]	5,000	7,500	10,500	13,000	15,000
2-Lane Freeway Ramp [3]	10,000	15,000	21,000	26,000	28,000

Notes:
[1] Based on LOS threshold volumes established in the City of Gilroy 1997 - 1999 Traffic Monitoring Program reports. All volumes are approximate and assume ideal roadway characteristics.
[2] The capacity limitation is related to neighborhood quality of life rather than the physical carrying capacity of the road. This assumes a standard suburban neighborhood, 40-foot roadway width, and 25 mile per hour speed limit with normal speed violation rates.
[3] Capacities given for each level of service assume the same level of service for adjoining merging roadway as well as level of service being determined by volume to capacity and not attainable speed. Level of service will be controlled by freeway level of service if worse than ramp.

Table 4

Density-Based Freeway Level of Service Criteria

Level of Service	Density (vehicles/mile/lane)
A	≤10.0
B	10.1 to 16.0
C	16.1 to 24.0
D	24.1 to 46.0
E	46.1 to 55.0
F	> 55.0

Source: VTA, *Transportation Impact Analysis Guidelines*, May 1998.

Existing Levels of Service

Intersections

Current operations of the key intersections were evaluated with the existing volumes, existing lane configurations, traffic control devices, and signal phasings/timings used as inputs to the TRAFFIX level of service calculation program. The results are presented in Tables 5a and 5b for signalized and unsignalized intersections, respectively. The level of service calculation sheets are contained in Appendix B. Table 5b presents both the level of service based on the delay for all movements at the unsignalized intersections and the level of service based on the worst case movement or lane group, usually the left-turn movement from the minor (stop sign-controlled) street.

The results of the level of service calculations indicate that all of the key intersections are operating at acceptable levels under Existing Conditions. The four signalized intersections are operating at LOS B or C during both the AM and PM peak hours. Overall intersection operations at the key unsignalized intersections are at LOS A during the AM, PM, and Saturday peak hours.

Table 5a

Existing Signalized Intersection Levels of Service

Intersection	Peak Hour	Count Date	Average Intersection Delay[1]	LOS[2]
Monterey Street and Luchessa Avenue	AM	11/01	18.7	C
	PM	11/01	22.7	C
Monterey Street and Southbound US 101 Ramps	AM	11/01	12.6	B
	PM	11/01	13.8	B-
Monterey Street and Northbound US 101 Ramps	AM	11/01	17.1	C
	PM	11/01	20.6	C
Santa Teresa Boulevard and Thomas Road	AM	11/01	18.6	C
	PM	11/01	16.2	C+
	Sat	12/01	16.3	C+

Notes: [1] Whole intersection weighted average delay expressed in seconds per vehicle.
[2] LOS calculations performed using the approved CMP level of service analysis program, TRAFFIX, which is based on the *1985 Highway Capacity Manual* delay methodology for signalized intersections.

At all of the unsignalized intersections, the minor street approaches have no separate turn lanes. The worst case movement/lane groups at the intersections of Luchessa Avenue with Princevalle Street and with Church Street are the southbound approaches (Princevalle and Church Streets). The Princevalle Street southbound approach is operating at LOS A during the AM, PM, and Saturday peak hours. The southbound Church Street approach is operating at LOS B during the AM and PM peak hours and LOS A during the Saturday peak hour. At the Monterey Street/Farman Frontage Road intersection, the worst case approach is the eastbound (Farman Frontage Road) approach, which is currently operating at LOS C during the AM peak hour, an unacceptable LOS D during the PM peak hour, and LOS B during the Saturday peak hour.

Table 5b

Existing Unsignalized Intersection Levels of Service

Intersection	Peak Hour	Count Date	Intersection		Worst Case Movement	
			Average Delay[1]	LOS [2]	Average Delay	LOS
Luchessa Avenue and Princevalle Street	AM	11/01	1.9	A	5.5	B
	PM	11/01	1.3	A	6.1	B
	Sat	12/01	1.0	A	4.1	A
Luchessa Avenue and Church Street	AM	11/01	1.1	A	5.5	B
	PM	11/01	0.9	A	6.8	B
	Sat	12/01	0.9	A	4.9	A
Monterey Street and Farman Frontage Road	AM	11/01	0.5	A	10.6	C
	PM	11/01	0.5	A	24.6	D
	Sat	12/01	0.4	A	10.0	B

Notes: [1] Average total intersection delay for unsignalized intersections expressed in seconds per vehicle.
[2] LOS calculations performed using TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections.

Roadway Segments

Existing roadway segment operations are summarized in Table 6. Existing daily traffic volumes on Luchessa Avenue and Monterey Street were obtained from machine counts conducted in November 2001. All four segments are currently operating at good levels (LOS A).

Two-Lane Highway Segment

Existing traffic volume data and roadway characteristics for the segment of SR 152 between US 101 and Frazier Lake Road were obtained from the *Gilroy Retail Center Traffic Impact Analysis* (Higgins Associates, July 26, 2001). Traffic counts were conducted on SR 152, west of Frazier Lake Road in Feburary 2001. Level of service calculations were conducted using the Retail Center TIA data. Calculation sheets are included in Appendix I. The results indicate that this segment of SR 152 is currently operating at LOS E during the AM and PM peak hours, unacceptable operating levels based on the City of Gilroy standard (LOS C).

Table 6

Existing Roadway Segment Levels of Service

Segment	Roadway Type[1]	LOS C Volume Threshold (vpd[2])	Existing Weekday Daily Volume	LOS
Luchessa Avenue, between Thomas Road and Princevalle St.	2-Lane Arterial	14,500	5,485	A
Luchessa Avenue, between Princevalle St. and Monterey St.	2-Lane Arterial	14,500	6,030	A
Monterey Street, between Tenth St. and Luchessa Ave.	4-Lane Divided Arterial	29,000	7,835	A
Monterey Street, between Luchessa Ave and US 101	4-Lane Divided Arterial	29,000	12,970	A

Note: [1] Roadway type of Luchessa Avenue based on classification in 2001 City of Gilroy Traffic Monitoring Program report. Monterey Street roadway type based on field observations.

[2] Vehicles per day.

Freeway Segments

Table 7 contains the existing freeway segment levels of service based on the segment densities reported in the CMP's *1998 Monitoring and Conformance Report.* The 2000 monitoring report did not survey freeway segments in the City of Gilroy. In addition, the 1998 monitoring report did not include freeway segments south of the City of Morgan Hill during the AM peak hour. Therefore, only PM peak hour information was used and presented in Table 7. The segments of US 101 reported in this table were chosen to be consistent with the segments in the VTA's monitoring report. Based on the monitored freeway segment densities, all of the segments are operating at LOS B during the PM peak hour under Existing Conditions.

Table 7

Existing Freeway Segment Levels of Service[1]

Segment[2]	Peak Hour	Direction	Density[3]	LOS
US 101, Leavesley Road to Tenth Street	AM	NB &SB	n/a[4]	n/a[4]
	PM	NB	12.9	B
		SB	12.0	B
US 101, Tenth Street to SR 25	AM	NB & SB	n/a[4]	n/a[4]
	PM	NB	10.6	B
		SB	15.1	B

Note: [1] Segment densities obtained from Appendices E and F of the VTA's *1998 CMP Monitoring and Confomance Report.* (these segments were not monitored in the *2000 CMP Monitoring and Confomance Report*) Levels of service reported here based on the monitoring report densities.

[2] Segments of US 101 presented here are based on those in the *1998 CMP Monitoring and Confomance Report.* The study segments for this analysis are located within these segments.

[3] Density expressed in vehicles per mile per lane.

[4] Not available. Not included in the VTA's 1998 monitoring report.

CHAPTER 3 - BACKGROUND CONDITIONS

This chapter discusses the operations of the key intersections under Background Conditions. Background Conditions are defined as conditions prior to completion of the proposed development. Traffic volumes for Background Conditions comprise existing volumes from counts plus traffic generated by approved developments in the area. This chapter first describes the procedure used to estimate the background traffic volumes. Then, the results of the level of service analysis for Background Conditions are presented.

Background Traffic Estimates

The traffic volumes for Background Conditions were estimated by adding existing volumes and traffic generated by approved but not yet constructed projects in the vicinity of the site. The list of approved projects was developed with input from City of Gilroy Planning staff. Eleven approved developments were identified in the vicinity of the project site (see Table C-1 in Appendix C). These developments include Eagle Ridge (450 homes), the Highway 152 Retail Center (929,200 square feet), Wellington Business Park (90 acres), and Ramada Inn (96 rooms).

The traffic associated with these projects was estimated based on trip generation rates published in the Institute of Transportation Engineers *Trip Generation* (6th edition). Trip generation estimates for the approved developments are included in Table C-1. The trips associated with each project were then assigned to the roadway network based on the trip distribution patterns contained in the City of Gilroy 2001 Traffic Monitoring Program TRAFFIX model, relative locations of complementary land uses, and existing travel patterns. The traffic associated with the approved developments was added to the existing volumes at the key intersections and roadway segments to estimate traffic volumes for Background Conditions.[1] Figure 6 illustrates the traffic volumes estimated at the key intersections for Background Conditions.

[1]It should be noted that the Saturday peak-hour traffic estimates assume that all the uses included in the approved developments peak at the same time, producing a conservatively high estimate of Saturday peak-hour volumes. Furthermore, the method used to estimate traffic volumes added by the approved developments during all study periods is conservative. The approved developments include both residential and commercial/industrial developments. Some of the trips originating in the residential developments will be destined for the industrial/commercial uses. No reduction was applied to take into account this internalization between approved developments within Gilroy, resulting in some "double counting."

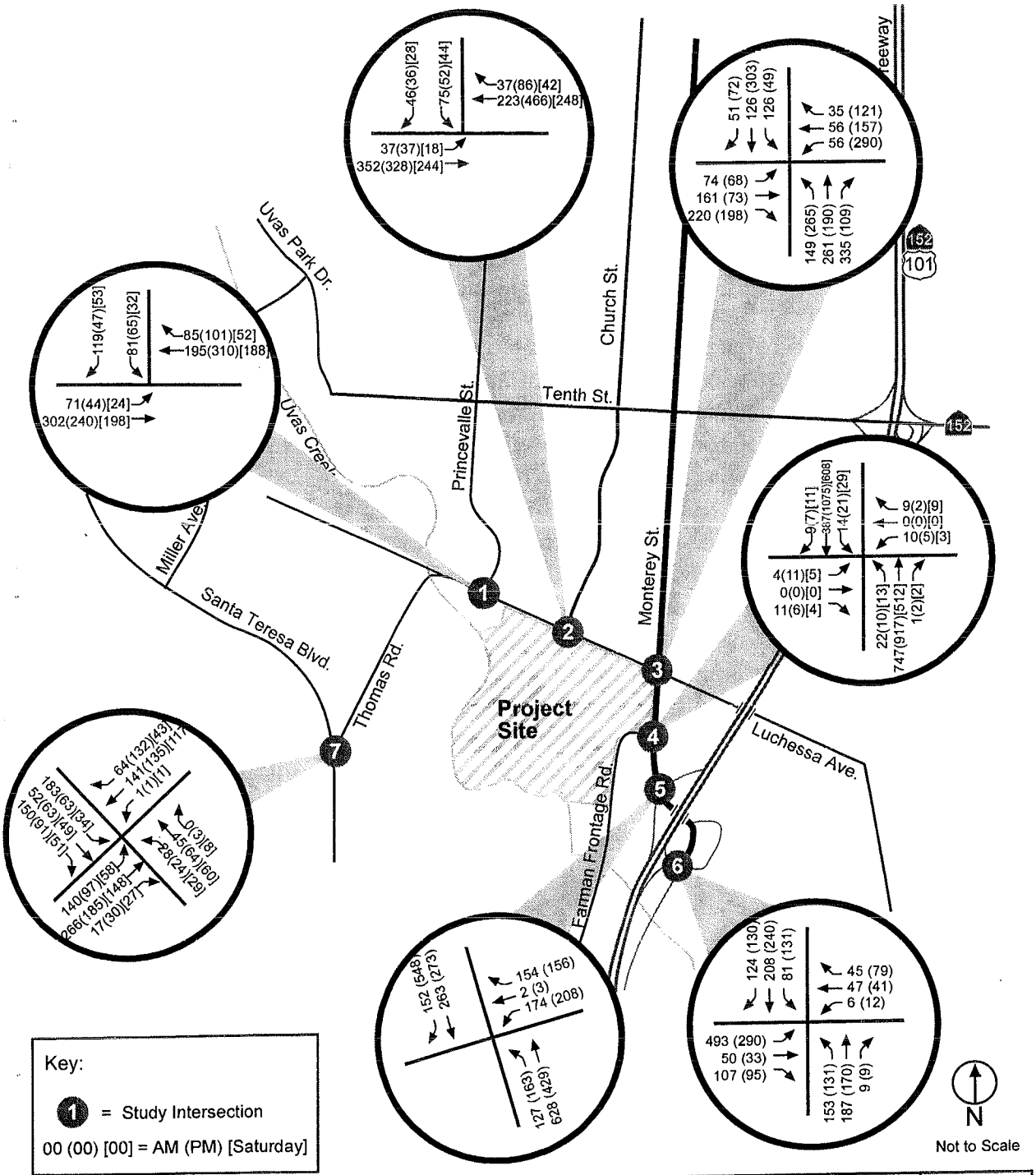


Figure 6 — **BACKGROUND PEAK-HOUR TRAFFIC VOLUMES**

425-16-01

Background Levels of Service

Intersections

The results of the intersection level of service calculations for Background Conditions are presented in Tables 8a and 8b. The LOS calculation sheets are contained in Appendix B. The results indicate that the key intersections will continue to operate at acceptable levels with traffic added by approved development projects. All of the key signalized intersections are projected to continue to operate at LOS B or C during both peak hours. The overall operating levels at the three unsignalized intersections are projected to be LOS A. The worst case approach at the Luchessa Avenue/Princevalle Street intersection is projected to operate at LOS B during the AM and PM peak hours and LOS A during the Saturday peak hour. The worst case approach at the intersection of Luchessa Avenue and Church Street is projected to operate at LOS B during the weekday AM and Saturday peak hours and LOS C during the Saturday peak hour. At the intersection of Monterey Street and Farman Frontage Road, the operation of the worst case approach (eastbound Farman Frontage Road) is projected to be LOS C during the AM and Saturday peak hours and an unacceptable LOS F during the PM peak hour. The PM peak hour volumes at this intersection did not meet the Caltrans Peak Hour Volume warrant for traffic signal installation (see Appendix E).

Table 8a

Background Signalized Intersection Levels of Service

Intersection	Peak Hour	Average Intersection Delay [1]	LOS [2]
Monterey Street and Luchessa Avenue	AM	20.2	C
	PM	23.1	C-
Monterey Street and Southbound US 101 Ramps	AM	13.7	B-
	PM	14.9	B-
Monterey Street and Northbound US 101 Ramps	AM	20.1	C
	PM	20.4	C
Santa Teresa Boulevard and Thomas Road	AM	19.2	C
	PM	17.7	C
	Sat	17.5	C

Notes: [1] Whole intersection weighted average delay expressed in seconds per vehicle.
[2] LOS calculations performed using the approved CMP level of service analysis program, TRAFFIX, which is based on the *1985 Highway Capacity Manual* delay methodology for signalized intersections.

Table 8b

Background Unsignalized Intersection Levels of Service

Intersection	Peak Hour	Intersection		Worst Case Movement	
		Average Delay[1]	LOS [2]	Average Delay[1]	LOS [2]
Luchessa Avenue and Princevalle Street	AM	1.3	A	5.9	B
	PM	1.3	A	7.6	B
	Sat	0.9	A	4.7	A
Luchessa Avenue and Church Street	AM	1.4	A	7.5	B
	PM	1.1	A	10.2	C
	Sat	0.9	A	6.1	B
Monterey Street and Farman Frontage Road	AM	0.5	A	13.0	B
	PM	0.9	A	**60.1**	**F**
	Sat	0.4	A	14.6	C

Notes: [1] Average total intersection delay for unsignalized intersection expressed in seconds per vehicle.
[2] LOS calculations performed using TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections.

Roadway Segments

The operations of the key roadway segments with the addition of traffic associated with already approved developments is presented in Table 9. The key roadway segments are projected to continue to operate at acceptable levels.

Two-Lane Highway Segments

SR 152 will be widened from US 101 to Llagas Creek with widening to Gilroy Foods completed in November 2002. The widening would also include a traffic signal at Gilroy Foods. With these improvements, the section of SR 152 between US 101 and Llagas Creek would operate as a four-lane arterial. The segment of SR 152 between Llagas Creek and Frazier Lake Road would still operate as a two-lane highway. With the addition of traffic associated with already approved developments, this segment is projected to continue to operate at LOS E during the AM peak hour and degrade from LOS E to F during the PM peak hour. These operating levels are unacceptable based on the City's standard.

Table 9

Background Roadway Segment Levels of Service

Segment	Roadway Type[1]	LOS C Volume Threshold (vpd[2])	Weekday Daily Volume	LOS
Luchessa Avenue, between Thomas Road and Princevalle St.	2-Lane Arterial	14,500	7,320	A
Luchessa Avenue, between Princevalle St. and Monterey St.	2-Lane Arterial	14,500	8,035	A
Monterey Street, between Tenth St. and Luchessa Ave.	4-Lane Divided Arterial	29,000	9,765	A
Monterey Street, between Luchessa Ave and US 101	4-Lane Divided Arterial	29,000	14,500	A

Note: [1] Roadway type of Luchessa Avenue based on classification in 2001 City of Gilroy Traffic Monitoring Program report. Monterey Street roadway type based on field observations.
[2] Vehicles per day.

CHAPTER 4 - PROJECT CONDITIONS

The impacts of the proposed Gilroy Sports Park and buildout of the USA amendment parcels on the surrounding roadway system are discussed in this chapter. First, the methodology used to estimate the amount of traffic generated by each component of the project is described. Then, the results of the level of service calculations for Project Conditions are presented. Project Conditions are defined as Background Conditions plus traffic generated by the proposed project. Project Conditions were evaluated in seven phases. A comparison of intersection and roadway segment operating levels under Background and Project Conditions is then presented, and the impacts of the project on the key intersections and roadway segments are described. The potential impacts of the project on freeway segments in the vicinity of the project site are also discussed.

Project Traffic Estimates

The amount of traffic associated with the project was estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In the first step, the amounts of traffic entering and exiting the site were estimated for the study periods. In the second step, the directions the trips use to approach and depart the site were estimated. The trips were assigned to specific street segments and intersection turning movements in the third step. The results of the process for the Gilroy Sport Park and USA amendment are described in the following sections.

Trip Generation

Project trip generation was estimated for the individual project components and then summed to estimate the total number of trips generated by the project. Table 10 presents a summary of the trip generation estimated for the project. The methodologies used to estimate the trip generation for each component are described in the following sections.

Sports Park

Peak-hour trip generation for the sports park component of the project was estimated based on the proposed number and types of playing fields and other uses, as well as input from the project architect on the expected operation of the sports park. The trip generation estimates assumed the use of all softball/baseball fields at one time. These ball fields are overlaid with soccer fields, which would not be in use during softball or baseball games. Basing the trip generation on the use of all softball/baseball fields was more conservative than assuming the use of all soccer fields because soccer teams are likely to have slightly fewer players than softball/baseball teams (12 per team versus 15 to 18 per team) and there are fewer proposed soccer fields than ball fields (seven soccer fields versus 13 softball and baseball fields).

Table 10

Trip Generation Estimates

Component	Use	Weekday Daily		AM Trip Rate[1]	AM Peak Hour Trips			PM Trip Rate[1]	PM Peak Hour Trips			Sat. Trip Rate[1]	Saturday Peak Hour Trips		
		Rate[1]	Trips		In	Out	Total		In	Out	Total		In	Out	Total
Sports Park															
Phases I& II	Entry Road Colt Baseball (1) Little League (2)	n/a	940	n/a	5	5	10	n/a	56	56	112	n/a	74	74	148
Phase III	Softball (1) Comm. Rec.	n/a	570	n/a	5	5	10	n/a	34	34	68	n/a	58	58	116
Phase IV	Softball (4)	n/a	1,300	n/a	5	5	10	n/a	78	78	156	n/a	110	110	220
Phase V	Softball (4)	n/a	1,300	n/a	5	5	10	n/a	78	78	156	n/a	110	110	220
VI & VII	Softball (1) General Park	n/a	490	n/a	20	20	40	n/a	29	29	58	n/a	48	48	96
Phases VIII&IX	Other Roadway Improvements & Uvas Creek Trail south	n/a	0	n/a	0	0	0	n/a	0	0	0	n/a	0	0	0
Subtotal			*4,600*		*40*	*40*	*80*		*275*	*275*	*550*		*400*	*400*	*800*
Residential															
	Single-Family	9.57	861	0.75	17	51	68	1.01	58	33	91	0.94	46	39	85
	Condo/Townhouse	5.86	334	0.44	4	21	25	0.54	17	14	31	0.47	14	12	27
Subtotal			*1,195*		*21*	*71*	*93*		*75*	*47*	*122*		*60*	*51*	*111*
Commercial															
	Shopping Center	36.17	21,347	0.78	281	180	460	3.43	973	1,054	2,027	4.69	1,441	1,330	2,770
	Pass-by Reduction	30%	(6,404)	30%	(69)	(69)	(138)	30%	(304)	(304)	(608)	30%	(416)	(415)	(831)
Subtotal			*14,943*		*212*	*111*	*322*		*669*	*750*	*1,419*		*1,025*	*915*	*1,939*
Total			**20,738**		**273**	**222**	**495**		**1,019**	**1,072**	**2,091**		**1,072**	**1,366**	**2,851**

Notes: [1] Sports park trip generation is estimated based on expected usage of the park. Daily sports park trips were estimated assuming 12 percent of daily trips occur during the PM peak hour. Residential trip generation rates are from ITE *Trip Generation* (6th ed.) for single-family detached and townhouse/condominium land uses. Commercial trip generation is estimated based on ITE regression equations for shopping center trip generation. The presented rates are calculated by dividing the estimate number of trips by the size of the commercial space in thousands of square feet.

Trip generation estimates were first developed for the worst case condition, the Saturday peak hour. In addition to those described above, other assumptions include:

(1) 30 players per field for softball and Little League and 36 players per field for colt baseball;

(2) One spectator per player for softball and colt baseball and 35 spectators per Little League game (slightly more than one per player to reflect more parents watching their children);

(3) An auto occupancy of 2.0 persons per vehicle for softball and colt baseball and 2.1 persons per vehicle for Little League (the higher occupancy for Little League was assumed due to more parents arriving with children).

(4) Seventy five percent (75 %) of the games were assumed to begin or end during the peak hour. It was further assumed that the players and spectators associated with these games would arrive or leave during that hour.

(5) Commercial recreation, general park use, and special events were estimated to add 200 trips (50% inbound and 50% outbound) during the Saturday peak hour.

(6) PM peak-hour trip generation was assumed to be 75 % of the Saturday peak-hour trip generation for softball and baseball games and 50 % of Saturday peak-hour trip generation for general park use, commercial recreation and special events.

(7) AM peak-hour trip generation was assumed to be primarily associated with drop-in use of the park and no organized events are expected during the morning commute hours. City staff estimated that a maximum of 50 people would be likely to use the park during this time period.[2] It was assumed that 80 percent of park users during the morning peak hour would travel by car and would enter and exit the site during the AM peak hour. The AM peak-hour trip generation for the sports park was therefore estimated to be 80 trips (40 inbound and 40 outbound).[3]

(8) In order to estimate weekday daily trip generation for the sports park, a peak-hour factor was developed based on the relationships of daily to PM peak-hour trip rates

[2]Personal communication with Bill Hedley, City of Gilroy Department of Community Development, December, 14, 1999.

[3]This trip generation estimate is believed to be conservative. The AM peak-hour trip generation for a 78-acre park based on Institute of Transportation Engineers AM peak-hour trip generation rates for a "County Park" land use is one trip.

for similar uses contained in *Trip Generation* (Institute of Transportation Engineers, 1997). It is estimated that 12 percent of the daily sports park trips will enter and exit the site during the PM peak hour. This factor was used to expand PM peak-hour trip generation to estimate weekday daily sports park trip generation.

A summary of the trips generation estimates is contained in Appendix D, including phase by phase estimates and estimates for use of all soccer fields (for informational purposes).

The sports park, as proposed, is estimated to generate a total of 4,600 weekday daily trips, 80 AM peak-hour tips (40 inbound and 40 outbound), 550 PM peak-hour trips (275 inbound and 275 outbound), and 800 Saturday peak-hour trips (400 inbound and 400 outbound). The trip generation estimates are presented in Table 10 by phase.

Residential Development

The amount of traffic generated by the residential parcels was estimated by applying appropriate trip generation rates, corresponding to the land use type, to the development size. It was assumed that the residential parcels would be developed for the maximum development of 90 single-family homes and 57 multi-family homes. The standard source used to estimate vehicular trip generation is the Institute of Transportation Engineers (ITE) *Trip Generation* (6th edition). The ITE trip generation rates for "Single-Family Detached Residential" and "Condominium/Townhouse" land uses were applied to the size of the proposed development in number of units. The trip generation rates and resulting trip generation estimates are presented in Table 10.

The proposed residential development is estimated to generate a total of 1,195 weekday daily trips, 93 AM peak-hour tips (21 inbound and 71 outbound), 122 PM peak-hour trips (75 inbound and 47 outbound), and 111 Saturday peak-hour trips (60 inbound and 51outbound).

Commercial Parcels

There is no specific development proposed for the commercial parcels. The parcels will be zoned Commercial General Services. At the direction of City staff, it was assumed that approximately 590,000 square feet (s.f.) of retail space would be developed. This development size was estimated based on a 25 percent floor-area-ratio (FAR)[4] and an average building height of two stories on approximately 27 acres. The ITE trip generation regression equations for shopping centers were used

[4]This FAR is consistent with the City of Gilroy General Plan EIR. City staff has indicated that the commercial parcels are located within a floodway, and therefore, development on the commercial parcels is likely to be limited to an FAR of 25 percent or less.

to estimate the project trip generation. The buildout size of 590,000 s.f. was input to these equations to estimate daily and AM, PM, and Saturday peak-hour trip generation. The results are presented in Table 10. It was assumed that 50 percent of the trips would be generated by the northen parcels and 50 percent would be generated by the southern parcels.

A 30 percent reduction factor was applied to the shopping center trip generation estimates to account for pass-by trips. Pass-by trips are trips generated by the proposed project that are attracted from the traffic already passing the project site on an adjacent street. A 30 percent reduction is the maximum allowed under VTA guidelines.

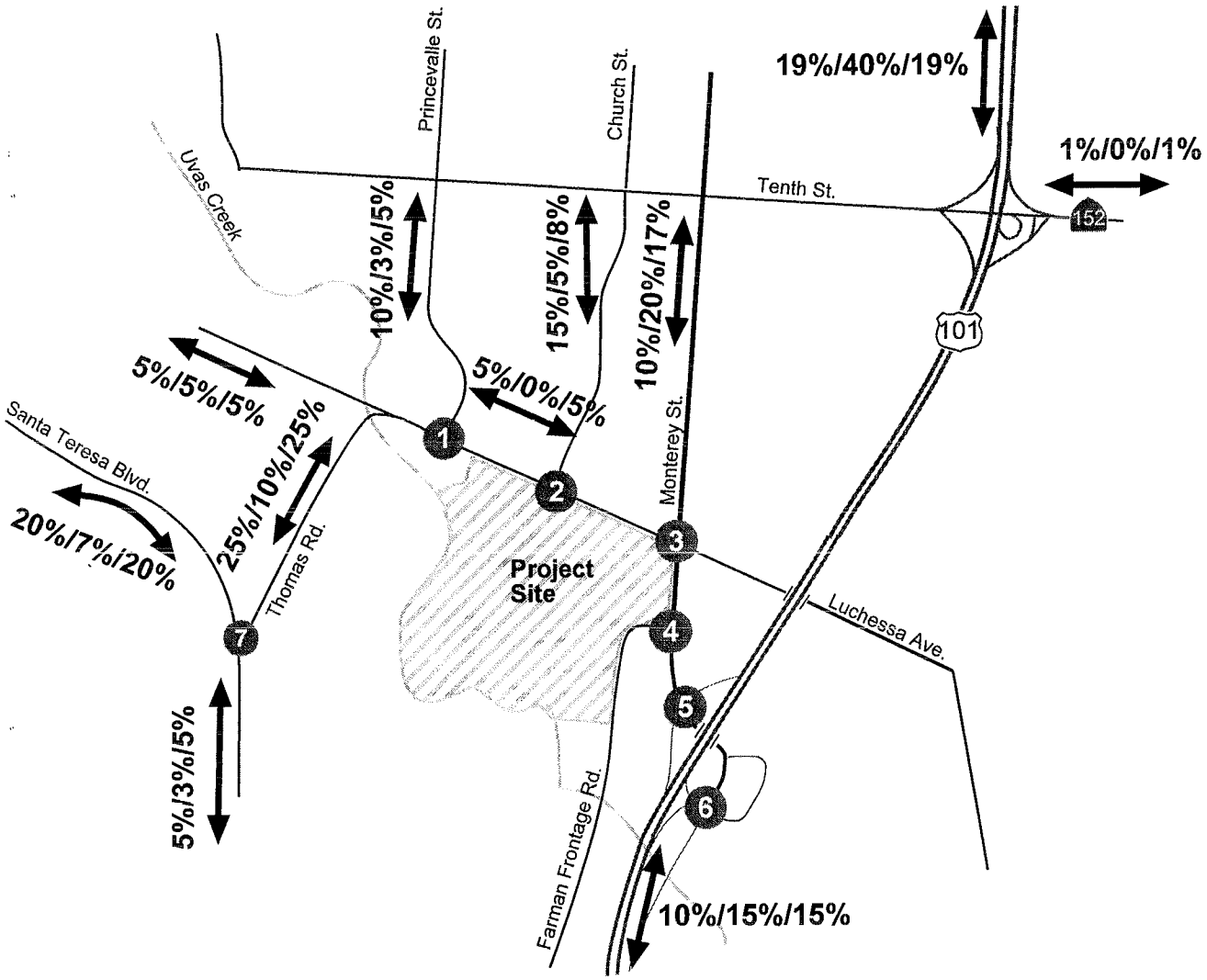
With the application of the pass-by reduction, the commercial parcels are estimated to add 14,943 new daily trips, 322 AM peak-hour trips (212 inbound and 111 outbound), 1,419 PM peak-hour trips (669 inbound and 750 outbound), and 1,939 Saturday peak-hour trips (1,025 inbound and 915 outbound).

Trip Distribution

The trip distribution pattern for the project was estimated based on existing travel patterns in the vicinity of the site and the relative locations of complementary land uses in the area. Separate distribution patterns were developed for each project component. The major directions for project-generated traffic to approach and depart the project site are estimated to be:

Roadway/Direction	Sports Park	Residential	Commercial
Luchessa Avenue West	5%	5%	5%
Santa Teresa Boulevard North	20%	7%	20%
Santa Teresa Boulevard South	5%	3%	5%
Princevalle Street North	10%	3%	5%
Church Street North	15%	5%	8%
Monterey Street North	10%	20%	17%
US 101 North	15%	40%	19%
US 101 South	10%	15%	15%
SR 152 East	5%	0%	1%
Luchessa Avenue East	0%	2%	0%
Princevalle/Church neighborhood	5%	0%	5%
	100%	100%	100%

The trip distribution pattern is illustrated on Figure 7.



Key:

1 Study Intersection

XX/XX/XX = Sports Park/ Residential/ Commercial

N

Not to Scale

Figure 7 — **TRIP DISTRIBUTION PATTERN**

425-17-01

Trip Assignment

The trips generated by the proposed project were assigned to the roadway system based on the directions of approach and departure discussed above. The pass-by trips (30 percent of the commercial development) were assigned based on the existing distribution of traffic (northbound versus southbound) on Monterey Street at the site driveways.

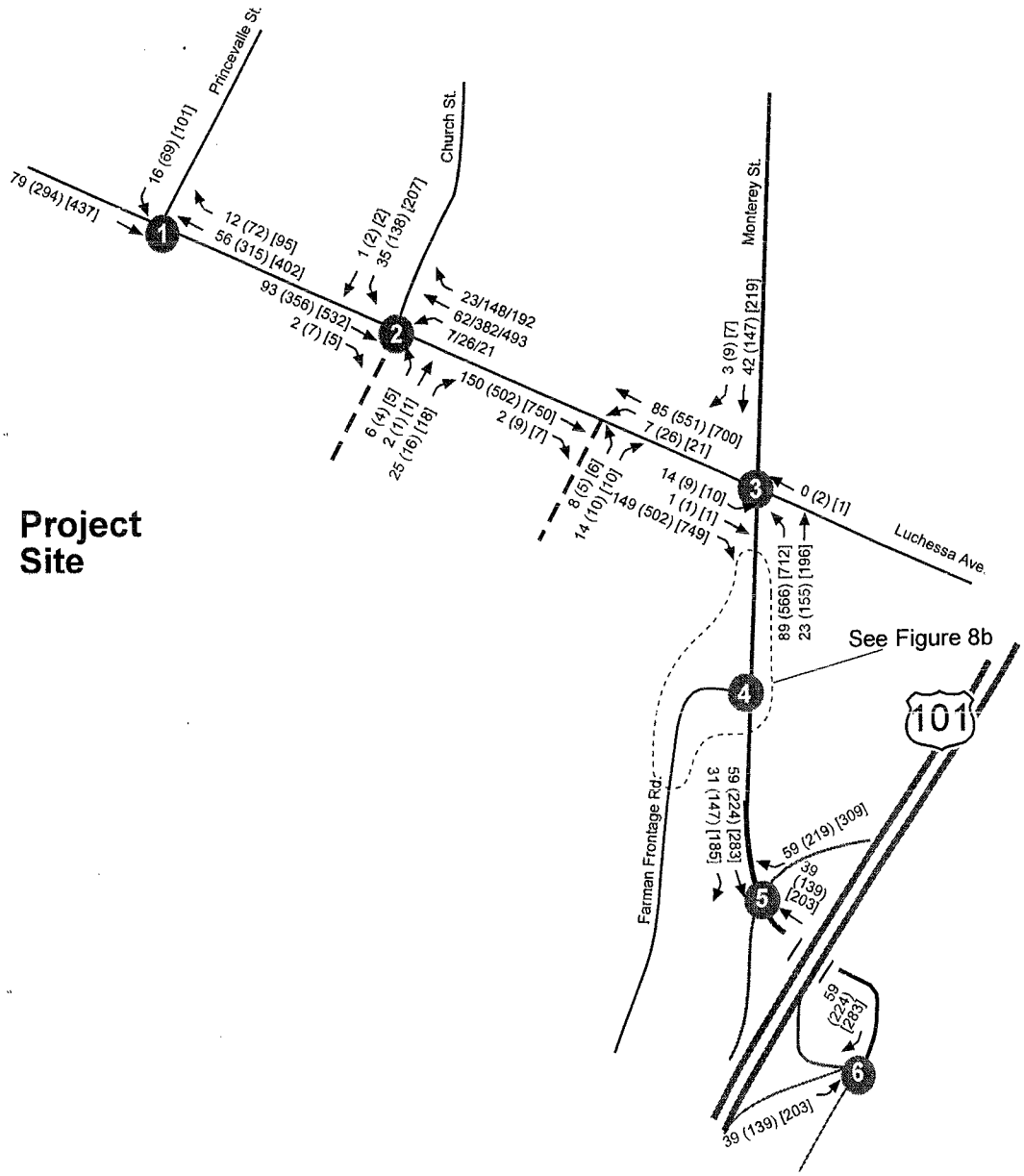
Figure 8a presents the peak-hour project trip assignments by turning movement at the study intersections and on nearby roadway segments for buildout conditions. Figure 8b shows project trips at the site driveways and the intersection of Monterey Street and Farman Frontage Road.

The project trips for each analysis phase were added to the traffic volumes for Background Conditions to achieve turning-movement volumes at the key intersections for each analysis phase. The total traffic volumes at each of the key intersections under project buildout conditions are shown on Figure 9.

Project Intersection Levels of Service

Intersection level of service calculations were conducted to evaluate the operating conditions of the key intersections with project traffic and the potential impacts of the proposed project on the local roadway system. Intersection operations were evaluated for seven levels of development of the project.

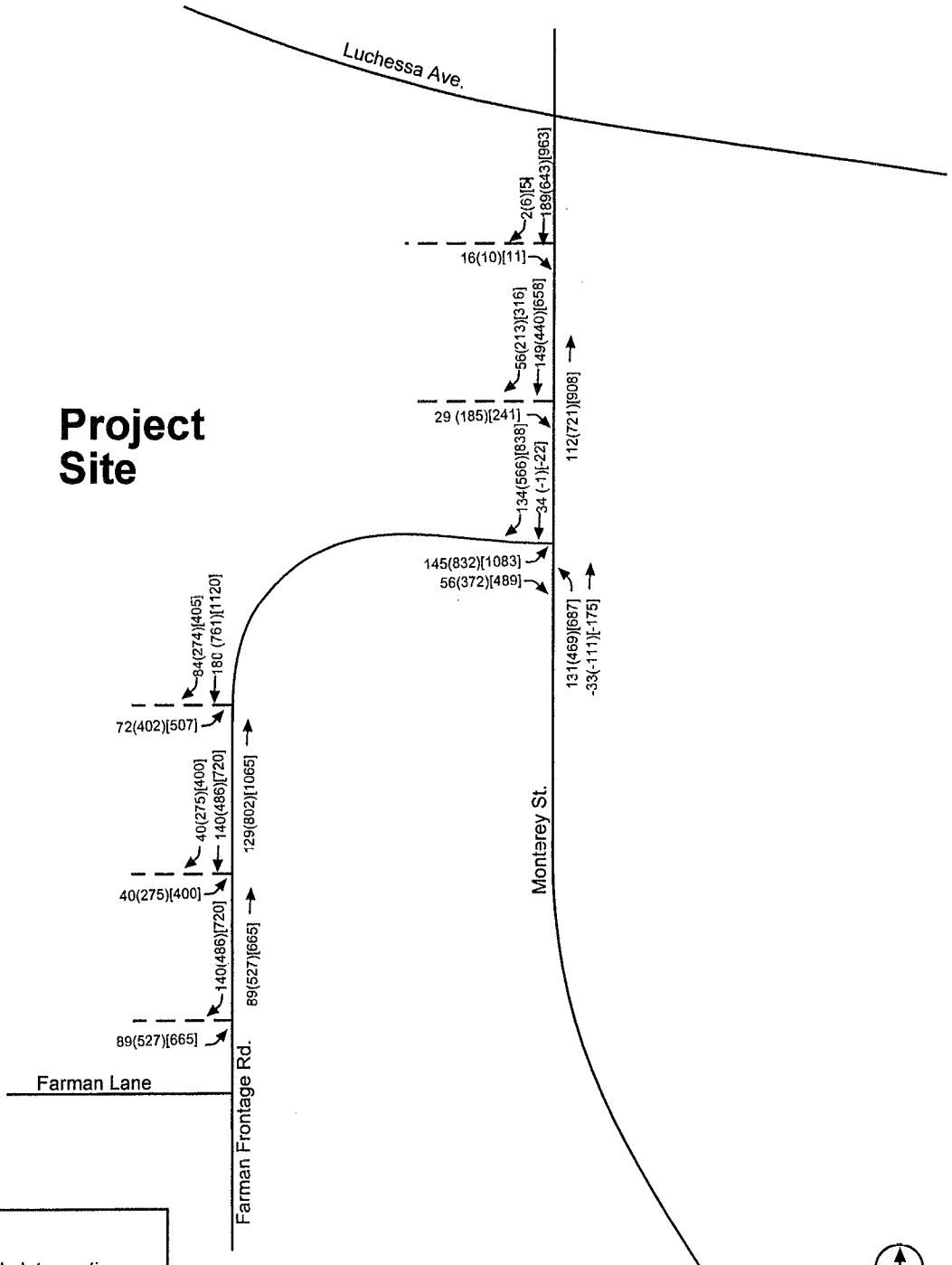
The results of the intersection level of service calculations for Background and Project Conditions are summarized in Tables 11a and 11b. The signalized intersections of Monterey Street with the US 101 southbound ramps and with the US 101 northbound ramps and the Santa Teresa Boulevard and Thomas Road intersection are projected to continue to operate at acceptable levels of service through buildout of the proposed project. The signzlied intersection of Monterey Street and Luchessa Aveue is projected to operate at acceptable levels thought the final phase of the Sports Park. With buildout of the residential and commercial parcels, intersection operations are projected to deteriorate to LOS F during the PM peak hour. The Monterey Street and Luchessa Avenue intersection is projected to continue to operate at LOS C during the AM peak hour.



Key:
1 Study Intersection
XX (XX)[XX] = AM(PM)[Saturday]

N
Not to Scale

Figure 8a	PEAK-HOUR PROJECT TRIP ASSIGNMENT (PROJECT BUILDOUT)	
425-18-01		



Note: Trip assigment at commercial driveways and the Monterey Street/Farman Frontage Road intersection includes pass-by trips.

Figure 8b

425-18-01

PROJECT TRIP ASSIGNMENT AT SITE DRIVEWAYS AND NEARBY INTERSECTIONS

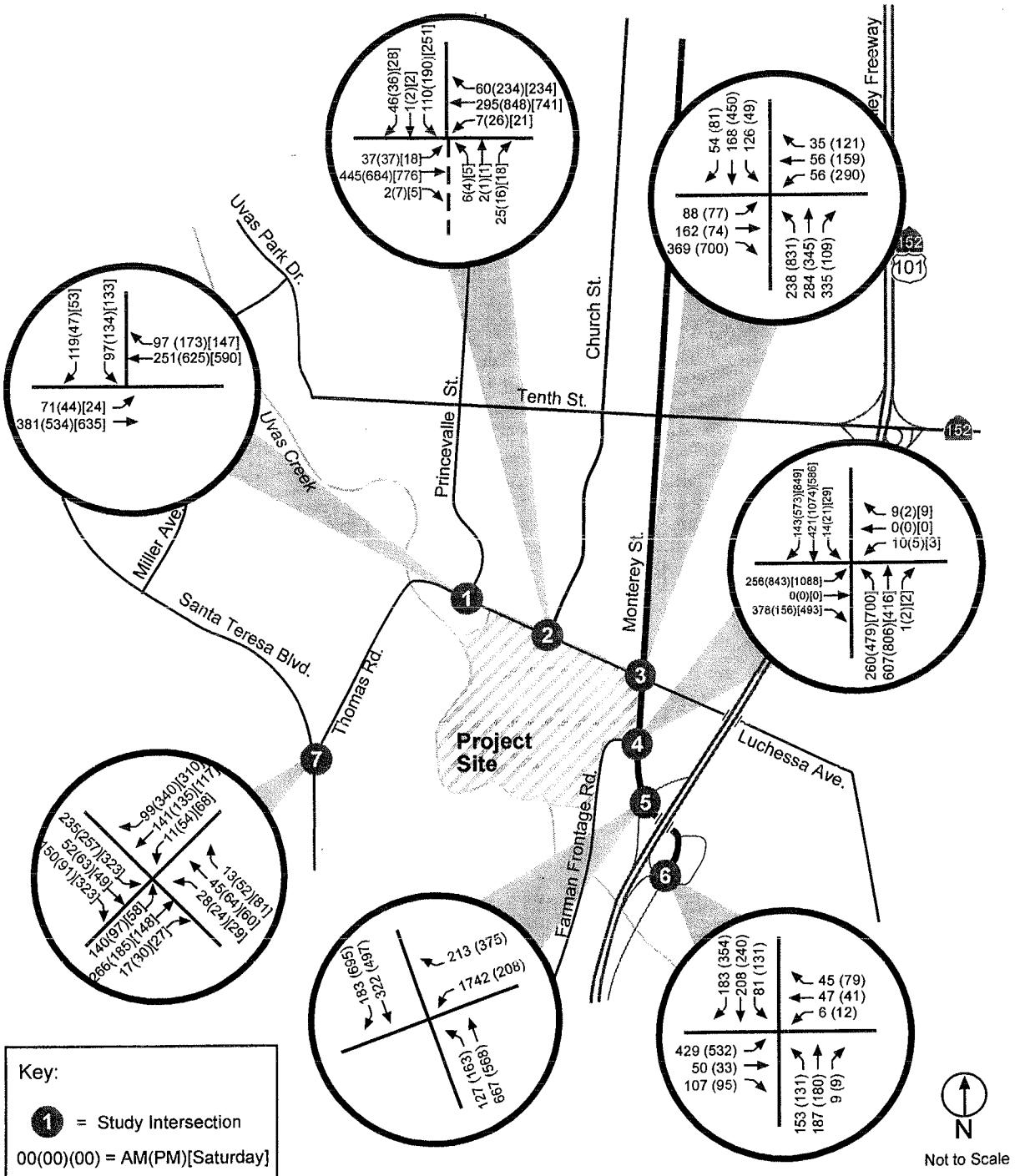


Figure 9
425-19-01

BACKGROUND PLUS PROJECT BUILDOUT PEAK-HOUR TRAFFIC VOLUMES

The overall operations of the unsignalized intersection of Luchessa Avenue and Princevalle Street are projected to be acceptable (LOS C or better) during the AM, PM, and Saturday peak hours through project buildout. The worst case approach is projected to operate at an acceptable level through the final phase of the sports park. With buildout of the commercial parcels and the residential development, the worst case approach is projected to deteriorate to LOS E during the PM peak hour and LOS F during the Saturday peak hour. Operations during the AM peak hour are projected to continue to be LOS B, an acceptable level.

The overall operations of the Luchessa Avenue/Church Street intersection are projected to be acceptable through the final phase of the sports park. With the buildout of the project, overall intersection operations are projected to deteriorate to LOS F during the PM and Saturday peak hours. Operations during the AM peak hour are projected to continue to be LOS A. The worst case approach is also projected to operate at acceptable levels through the final phase of the sports park (LOS D or better) and deteriorate to LOS F during the PM and Saturday peak hours with buildout of the residential and commercial parcels.

As currently approved, the sports park project is required to install a traffic signal at the Monterey Street/Farman Frontage Road intersection prior to completion of Phase IV of the park. For this analysis, it was assumed that no lane additions would be made at this intersection as part of the proposed project. Overall intersection operations at the unsignalized intersection are projected to be acceptable through completion of Phase III of the sports park during AM, PM, and Saturday peak hours. The operations of the worst case approach, eastbound Farman Frontage Road, are projected to remain at acceptable levels during all three peak hours through the completion of Phase II of the sports park. With the completion of Phase III, this approach is projected to deteriorate to LOS E during the PM peak hour.

With signalization, the intersection of Monterey Street and Farman Frontage Road is projected to operate at acceptable levels during the AM, PM and Saturday peak hours (with no lane additions) from Phase IV through the final phase of the sports park. With buildout of the commercial and residential parcels, the operations of this intersection are projected to deteriorate to LOS F during the PM and Saturday peak hours. Operations during the AM peak hour are projected to be LOS C, an acceptable operating level.

Table 11a

Background and Project Signalized Intersection Levels of Service

Intersection/Scenario	Peak Hour	Average Delay[1]	LOS [2]
Monterey Street and Luchessa Avenue			
Background Conditions	AM	20.2	C
(Existing Conditions + Approved Projects)	PM	23.1	C-
Sports Park Phases I&II Conditions	AM	20.8	C
(Background Conditions + Park Phases I&II Traffic)	PM	23.4	C-
Sports Park Phase III Conditions	AM	20.8	C
(Phase II Conditions + Park Phase III Traffic)	PM	23.6	C-
Sports Park Phase IV Conditions	AM	20.8	C
(Phase III Conditions + Park Phase IV Traffic)	PM	24.2	C-
Sports Park Phase V Conditions	AM	20.8	C
(Phase IV Conditions + Park Phase V Traffic)	PM	24.8	C-
Sports Park Phase VI&VII Conditions	AM	20.9	C
(Phase V Conditions + Park Phases VI&VII Traffic)	PM	**25.1**	**D+**
Sports Park Phase VIII&IX Conditions[4]	AM	20.9	C
(Phase VI&VII Conditions + Park Phases VIII&IX Traffic)	PM	**25.1**	**D+**
Project Buildout Conditions	AM	22.3 (17.5)	C (C)
(Sports Park, Residential and Commercial Traffic)	PM	**>120** (21.4)	**F** (C)
Monterey Street and US 101 Southbound Ramps			
Background Conditions	AM	13.7	B
(Existing Conditions + Approved Projects)	PM	14.9	B-
Sports Park Phases I&II Conditions	AM	13.7	B
(Background Conditions + Park Phases I&II Traffic)	PM	14.9	B-
Sports Park Phase III Conditions	AM	13.7	B
(Phase II Conditions + Park Phase III Traffic)	PM	14.9	B-
Sports Park Phase IV Conditions	AM	13.7	B
(Phase III Conditions + Park Phase IV Traffic)	PM	14.9	B-
Sports Park Phase V Conditions	AM	13.7	B
(Phase IV Conditions + Park Phase V Traffic)	PM	14.9	B-
Sports Park Phase VI&VII Conditions	AM	13.7	B-
(Phase V Conditions + Park Phases VI&VII Traffic)	PM	15.0	B-
Sports Park Phase VIII&IX Conditions[3]	AM	13.7	B-
(Phase VI&VII Conditions + Park Phases VIII&IX Traffic)	PM	15.0	B-
Project Buildout Conditions	AM	14.2	B-
(Sports Park, Residential and Commercial Traffic)	PM	16.2	C+

Table 11a (cont.)

Background and Project Signalized Intersection Levels of Service

Intersection/Scenario	Peak Hour	Average Delay[1]	LOS [2]
Monterey Street and US 101 NB Ramps			
Background Conditions	AM	20.1	C
(Existing Conditions + Approved Projects)	PM	20.4	C
Sports Park Phases I&II Conditions	AM	20.1	C
(Background Conditions + Park Phases I&II Traffic)	PM	20.4	C
Sports Park Phase III Conditions	AM	20.1	C
(Phase II Conditions + Park Phase III Traffic)	PM	20.4	C
Sports Park Phase IV Conditions	AM	20.1	C
(Phase III Conditions + Park Phase IV Traffic)	PM	20.4	C
Sports Park Phase V Conditions	AM	20.1	C
(Phase IV Conditions + Park Phase V Traffic)	PM	20.4	C
Sports Park Phase VI&VII Conditions	AM	20.1	C
(Phase V Conditions + Park Phases VI&VII Traffic)	PM	20.4	C
Sports Park Phase VIII&IX Conditions[3]	AM	20.1	C
(Phase VI&VII Conditions + Park Phases VIII&IX Traffic)	PM	20.4	C
Project Buildout Conditions	AM	19.9	C
(Sports Park, Residential and Commercial Traffic)	PM	20.0	C
Monterey Street and Farman Frontage Road[4]			
Sports Park Phase IV Conditions	AM	9.9	B
(Phase III Conditions + Park Phase IV Traffic)	PM	12.0	B
	Sat	15.2	C+
Sports Park Phase V Conditions	AM	10.0	B
(Phase IV Conditions + Park Phase V Traffic)	PM	14.7	B-
	Sat	17.9	C
Sports Park Phase VI&VII Conditions	AM	8.5	B
(Phase V Conditions + Park Phases VI&VII Traffic)	PM	15.7	C+
	Sat	19.2	C
Sports Park Phase VIII&IX Conditions[3]	AM	8.5	B
(Phase VI&VII Conditions + Park Phases VIII&IX Traffic)	PM	15.7	C+
	Sat	19.2	C
Project Buildout Conditions	AM	20.5 (21.4)	C (C)
(Sports Park, Residential and Commercial Traffic)	PM	**>120** (20.8)	**F** (C)
	Sat	**>120** (21.4)	**F** (C)
Santa Teresa Boulevard and Thomas Road			
Background Conditions	AM	19.2	C
(Existing Conditions + Approved Projects)	PM	17.7	C
	Sat	17.5	C

Table 11a (cont.)

Background and Project Signalized Intersection Levels of Service

Intersection/Scenario	Peak Hour	Average Delay[1]	LOS[2]
Sports Park Phases I&II Conditions	AM	19.2	C
(Background Conditions + Park Phases I&II Traffic)	PM	17.7	C
	Sat	17.7	C
Sports Park Phase III Conditions	AM	19.2	C
(Phase II Conditions + Park Phase III Traffic)	PM	17.8	C
	Sat	17.8	C
Sports Park Phase IV Conditions	AM	19.2	C
(Phase III Conditions + Park Phase IV Traffic)	PM	17.9	C
		17.9	C
Sports Park Phase V Conditions	AM	19.2	C
(Phase IV Conditions + Park Phase V Traffic)	PM	17.9	C
	Sat	17.9	C
Sports Park Phase VI&VII Conditions	AM	19.2	C
(Phase V Conditions + Park Phases VI&VII Traffic)	PM	17.9	C
	Sat	17.9	C
Sports Park Phase VIII&IX Conditions[3]	AM	19.2	C
(Phase VI&VII Conditions + Park Phases VIII&IX Traffic)	PM	17.9	C
	Sat	17.9	C
Project Buildout Conditions	AM	19.6	C
(Sports Park, Residential and Commercial Traffic)	PM	18.0	C
	Sat	17.2	C

Notes: [1] Whole intersection weighted average delay expressed in seconds per vehicle.

[2] LOS calculations performed using the approved CMP level of service analysis program, TRAFFIX, which is based on the *1985 Highway Capacity Manual* delay methodology for signalized intersections.

[3] These phases of the sports park include roadway and Uvas Creek Trail improvements. The park is not estimated to generate any additional traffic over Phase VI&VII conditions.

[4] This intersection is currently controlled by stop signs. The approved sports park project was conditioned to signalized this intersection prior to completion of Phase IV of the park. See Table 10b for LOS results for phases of the project prior to signalization.

LOS deficiencies are indicated in **bold**. Mitigated LOS shown in parentheses.

Table 11b

Background and Project Unsignalized Intersection Levels of Service

Scenario	Peak Hour	Intersection		Worst Case Movement	
		Average Total Delay[1]	LOS [2]	Average Total Delay	LOS
Luchessa Avenue and Princevalle Street					
Background Conditions	AM	1.3	A	5.9	B
(Existing Conditions + Approved Projects)	PM	1.3	A	7.6	B
	Sat	0.9	A	4.7	B
Sports Park Phases I&II Conditions	AM	1.9	A	6.5	B
(Background Conditions + Park Phases I&II Traffic)	PM	1.4	A	8.3	B
	Sat	1.0	A	5.2	B
Sports Park Phase III Conditions	AM	1.9	A	6.5	B
(Phase II Conditions + Park Phase III Traffic)	PM	1.5	A	8.7	B
	Sat	1.0	A	5.6	B
Sports Park Phase IV Conditions	AM	1.9	A	6.6	B
(Phase III Conditions + Park Phase IV Traffic)	PM	1.5	A	9.9	B
	Sat	1.0	A	6.6	B
Sports Park Phase V Conditions	AM	1.9	A	6.6	B
(Phase IV Conditions + Park Phase V Traffic)	PM	1.9	A	11.4	C
	Sat	1.4	A	7.8	B
Sports Park Phase VI&VII Conditions	AM	1.9	A	6.8	B
(Phase V Conditions + Park Phases VI&VII Traffic)	PM	2.0	A	12.0	C
	Sat	1.5	A	8.4	B
Sports Park Phase VIII&IX Conditions[3]	AM	1.9	A	6.8	B
(Phase VI&VII Conditions + Park Phases VIII&IX Traffic)	PM	2.0	A	12.0	C
	Sat	1.5	A	8.4	B
Project Buildout Conditions	AM	7.0	B	8.6 (7.6)	B (B)
(Sports Park, Residential and Commercial Traffic)	PM	8.4	B	**65.6** (5.5)	**E** (B+)
	Sat	8.0	B	**61.9** (5.7)	**F** (B+)
Luchessa Avenue and Church Street					
Background Conditions	AM	1.4	A	7.5	B
(Existing Conditions + Approved Projects)	PM	1.1	A	10.2	C
	Sat	0.9	A	6.1	B
Sports Park Phases I&II Conditions	AM	1.4	A	6.3	B
(Background Conditions + Park Phases I&II Traffic)	PM	1.3	A	11.9	C
	Sat	1.0	A	5.0	B
Sports Park Phase III Conditions	AM	1.5	A	6.4	B
(Phase II Conditions + Park Phase III Traffic)	PM	1.5	A	13.0	C
	Sat	1.2	A	5.7	B

Table 11b (con't)

Background and Project Unsignalized Intersection Levels of Service

Scenario	Peak Hour	Intersection		Worst Case Movement	
		Average Total Delay[1]	LOS [2]	Average Total Delay	LOS
Sports Park Phase IV Conditions	AM	1.5	A	7.8	B
(Phase III Conditions + Park Phase IV Traffic)	PM	1.9	A	16.5	C
	Sat	1.5	A	10.5	C
Sports Park Phase V Conditions	AM	1.5	A	7.9	B
(Phase IV Conditions + Park Phase V Traffic)	PM	2.5	A	21.5	D
	Sat	2.0	A	13.8	B
Sports Park Phase VI&VII Conditions	AM	1.5	A	8.2	B
(Phase V Conditions + Park Phases VI&VII Traffic)	PM	2.9	A	24.4	D
	Sat	2.3	A	15.9	C
Sports Park Phase VIII&IX Conditions[3]	AM	1.5	A	8.2	B
(Phase VI&VII Conditions + Park Phases VIII&IX Traffic)	PM	2.9	A	24.4	D
	Sat	2.3	A	15.9	C
Project Buildout Conditions	AM	2.5 (6.4)	A (B)	12.8	C
(Sports Park, Residential and Commercial Traffic)	PM	**>120** (7.5)	**F** (B)	**>120**	**F**
	Sat	**>120** (8.5)	**F** (B)	**>120**	**F**
Monterey Street and Farman Frontage Road					
Background Conditions	AM	0.5	A	13.0	C
(Existing Conditions + Approved Projects)	PM	0.9	A	**60.1**	F
	Sat	2.2	A	**29.1**	**D**
Sports Park Phases I&II Conditions	AM	0.6	A	13.2	C
(Background Conditions + Park Phases I&II Traffic)	PM	14.1	A	**>120**	**F**
	Sat	6.6	B	**62.7**	**F**
Sports Park Phase III Conditions	AM	0.7	A	13.2	C
(Phase II Conditions + Park Phase III Traffic)	PM	54.4	**F**	**>120**	**F**
	Sat	113.1	**F**	**>120**	**F**

Notes: [1] Average total intersection delay, expressed in seconds per vehicle.

[2] LOS calculations performed using the CMP level of service analysis program, TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections.

[3] These phases of the sports park include roadway and Uvas Creek Trail improvements. The park is not estimated to generate any additional traffic over Phase VI&VII conditions.

[4] This intersection is currently controlled by stop signs. The project proposes for this intersection to continue to be stop sign controlled until Phase VIII of the project when a signal will be constructed. See Table 10a for LOS results for sports park phases VII& IX and buildout of the project when the signal will be in place.

LOS deficiencies are indicated in **bold**. Mitigated LOS shown in parentheses.

Intersection Impacts

The impacts of the proposed project were evaluated by comparing the results of the level of service calculations under Project (Buildout) Conditions to the results under Background Conditions. For this analysis, traffic impacts at signalized intersections are defined to occur when the addition of project traffic causes:

1. Intersection operations to deteriorate from an acceptable level (LOS C or better) under Background Conditions to an unacceptable level (LOS D, E, or F); or

2. Exacerbation of unacceptable operations (LOS D, E, or F).

Traffic impacts at unsignalized intersections are defined to occur when the addition of project traffic causes:

1. Overall intersection operations to deteriorate from an acceptable level (LOS C or better) under Background Conditions to an unacceptable level (LOS D, E, or F); or

2. The peak-hour volume traffic signal warrant to be satisfied and the worst case approach operations to deteriorate from LOS D or better to LOS E or F.

The results indicate that the project will have a significant adverse impact on four of the seven key intersections:

Luchessa Avenue and Princevalle Street
Luchessa Avenue and Church Street
Monterey Street and Luchessa Avenue
Monterey Street and Farman Frontage Road

The addition of project traffic to the Luchessa Avenue/Princevalle Street intersection causes the worst case approach to deteriorate from LOS B to LOS E during the PM peak hour and from LOS B to LOS F during the Saturday peak hour. The addition of project traffic to the Luchessa Avenue/Church Street intersection causes both overall intersection operations and the worst case approach to deteriorate from acceptable operating levels to LOS F during both the PM and Saturday peak hours. The intersection of Monterey Street and Luchessa Avenue is projected to degrade from LOS C to LOS F during the PM peak hour with the addition of project-generated traffic. The operation of the Monterey Street/Farman Frontage Road intersection is projected to deteriorate from acceptable level under Background Conditions to LOS F during the PM and Saturday peak hours with the addition of project traffic and construction of the proposed traffic signal.

Intersection Mitigation Measures

The proposed project is estimated to have a significant impact on four of the seven study intersections. Mitigation measures are discussed below for each intersection.

Luchessa Avenue and Princevalle Street

The estimated PM and Saturday peak-hour traffic volumes at the Luchessa Avenue/Princevalle Street intersection satisfy the Caltrans Peak Hour Volume warrant for traffic signal installation under Project Buildout Conditions (see Appendix E). The operation of this intersection would improve to LOS B during AM, PM, and Saturday peak hours with the installation of a traffic signal, with the existing lane configuration and two-phase signal operation. (Level of service calculation sheets are included in Appendix B.) Therefore, installation of a traffic signal would mitigate the project's impact at this intersection.

Luchessa Avenue and Church Street

The Caltrans Peak Hour Volume warrant requirements are also satisfied with the Project Buildout Conditions volumes estimated for the intersection of Luchessa Avenue and Church Street during the PM and Saturday peak hours. The project's impact at this intersection would be reduced to a less-than-significant level with the installation of a traffic signal, two-phase signal operation, and the following lane configuration:

Northbound and Southbound Approaches
One approach lane for all movements

Eastbound and Westbound Approaches
One left-turn lane
One shared through and right-turn lane.

With this improvement, the intersection is projected to operated at LOS B during the AM, PM, and Saturday peak hours with traffic volumes estimated for Project Buildout Conditions.

This mitigation measure requires the addition of left-turn pockets on the eastbound and westbound approaches at this intersection. With buildout of the City's General Plan, Luchessa Avenue will be widened to six lanes. The future roadway width is anticpated to be of 116 to 120 feet. This width will be more than adequate to accommodate the addition of left-turn pockets.

Monterey Street and Luchessa Avenue

The addition of a second northbound left-turn lane and an exclusive eastbound right-turn lane will improve the operation of the Monterey Street/Luchessa Avenue intersections from LOS F to LOS E during the PM peak hour. In order to further improve operations to LOS C, either a right-turn arrow would need to be provided for the eastbound right-turn movement (so vehicles in this movement could move while the northbound left-turn movement has a green arrow) or the eastbound right-turn movement would need to be removed from the intersection by a pork chop island and controlled by a yield sign. With these improvements, the intersection is projected to operate at LOS C during both the AM and PM peak hours, thus mitigating the project impact.

As noted above, an ultimate width of 116 to 120 feet is anticipated on Luchessa Avenue. A separate eastbound right-turn lane at the Monterey Street/Luchessa Avenue intersection could be accommodated within this width. The City's General Plan includes the addition of a separate eastbound right-turn lane at this intersection.

Currently, there is a wide landscaped median island on Monterey Street. Adequate width may be available within the median to provide the second northbound left-turn lane with median modifications. A second westbound through lane would also need to be added to Luchessa Avenue, west of Monterey Street, to serve as a receiving lane for the second northbound left-turn lane. The General Plan includes widening Luchessa Avenue and Monterey Street (between Luchessa Avenue and US 101) to six lanes and providing a second northbound left-turn lane at the Monterey Street/Luchessa Avenue intersection. The third northbound through lane on Monterey Street will need to end at the intersection of Monterey Street and Luchessa Avenue, mostly like as a "trap" right-turn or left-turn lane. The second northbound left-turn lane could be provided in this manner.

Monterey Street and Farman Frontage Road

As currently approved, the sports park project is required to install a traffic signal at the Monterey Street/Farman Frontage Road intersection prior to completion of Phase IV of the park. With the proposed project, it is recommended that this traffic signal be installed prior to completion of Phase III of the sports park and that additional improvements to this intersection be made to mitigate impacts associated with buildout of the commercial parcels.

The Peak Hour Volume Warrant for signal installation in the Caltrans *Traffic Manual* was investigated to determine when traffic volumes at the intersection would satisfy the warrant requirements. The estimated traffic volumes for Background Conditions, sports park Phase I&II, and sports park Phase III were compared to the requirements for rural areas because travel speeds on Monterey Street at Farman Frontage Road exceed 45 mph (the speed limit is 50 mph). Traffic volumes after the completion of Phases III through project buildout satisfy the warrant requirements during both peak hours. Traffic projections for the PM peak hour after completion of Phase II would marginally meet

the requirements. The signal warrant sheets are included in Appendix E.

With installation of the traffic signal, the intersection is projected to operate at LOS C during all three study periods through the final phase of the sports park with the existing lane configuration. With the development of the commercial parcels, additional turn lanes would be needed to serve traffic entering and exiting the shopping center. Two exclusive southbound right-turn lanes, two northbound left-turn lanes and widening of the eastbound approach would be needed to serve the projected volumes. The recommended lane configuration is:

Southbound Approach - one left-turn lane, two through lanes, two right-turn lanes
Westbound Approach - one shared lane for all movements
Northbound Approach - two left-turn lanes, one through lane, one shared through/right-turn lane
Eastbound Approach - one exclusive left-turn lane, one shared through and left-turn lane, and one right-turn lane.

In addition, right-turn arrows would need to be provided for the eastbound and southbound right-turn movements to provide LOS C intersection operations during all three study periods. This lane configuration will require split phase operation of the eastbound and westbound approaches.

This improvement will need to be coordinated with future plans to widen Monterey Street to six lanes. The recommended lane configuration may require widening on the west side (beyond that planned by the City) to provide one or both southbound right-turn lanes and possibly the second northbound left-turn lane. The northbound left-turn lane may be able to be added with median modifications alone.

The improvements to the Farman Frontage Road leg of the intersection will require substantial widening on Farman Frontage Road, which is currently 50 feet wide at the intersection and narrows to 30 feet approximately 100 feet west of Monterey Street. The TRAFFIX design queues estimated for the Farman Frontage Road approach to its intersection with Monterey Street indicate that a 250-foot right-turn pocket and two 475-foot left-turn pockets will be needed to accommodate the projected queues. It is also recommended that the second westbound lane on Farman Frontage Road (to accommodate the second northbound left-turn lane from Monterey Street) be continued to the sports park entrance road, approximately 600 feet from the intersection. Farman Frontage Road currently curves to the south just west of its intersection with Monterey Street. Some realignment of the roadway may be necessary (Farman Frontage Road may need to be extended farther to the west before it curves to the south) to provide adequate turning radii at its intersection with Monterey Street. Feasibility of the improvements to Farman Frontage Road and its intersection with Monterey Street is subject to more detailed engineering studies. Without implementation of all the mitigation measures, the project's impact would not be fully mitigated.

Project Site Access

Evaluation of the project site access is discussed in Chapter 7. Recommendations for improving the site access are also described.

Project Roadway Segment Levels of Service

Table 12 presents the operating levels of the key roadway segments under Background and Project Conditions. With the addition of project-generated traffic one of the four key segments is projected to operate at an unacceptable level: Luchessa Avenue between Princevalle and Monterey Streets is projected to operate at LOS E with the addition of project buildout traffic. The remaining segments are projected to continue to operate at LOS C or better, acceptable levels based on the City of Gilroy standard.

Roadway Segment Impacts

With the addition of project-generated traffic, one of the key roadway segments is projected to deteriorate to an unacceptable level. The segment of Luchessa Avenue between Princevalle Street and Monterey Street is projected to degrade from LOS A to LOS E, an unacceptable level based on the City of Gilroy standard. This deterioration in roadway segment level of service constitutes a significant impact. The three remaining segments are projected to continue to operate at acceptable levels, and therefore, the project's impact on these segments is less than significant.

Roadway Segment Mitigation Measures

Widening the segment of Luchessa Avenue between Monterey Street and Princevalle Street from two to four lanes would provide adequate capacity to serve the estimated project buildout traffic volumes and mitigate the project impact. The City's General Plan includes widening of Luchessa Avenue between Chestnut Street and Thomas Road (including the bridge over Uvas Creek) to six lanes. An ultimate roadway width of 116 to 120 feet is anticipated on Luchessa Avenue

Table 12

Background and Project Roadway Segment Levels of Service

Segment	Roadway Type[1]	LOS C Volume Threshold (vpd[2])	Background		Project	
			Weekday Daily Volume	LOS	Weekday Daily Volume	LOS
Luchessa Avenue, Thomas Road to Princevalle St.	2-Lane Arterial	14,500	7,320	A	13,360	C
Luchessa Avenue, Princevalle St. to Monterey St.	2-Lane Arterial	14,500	8,035	A	**16,965**	**E** (A)
Monterey Street, Tenth St. to Luchessa Ave.	4-Lane Divided Arterial	29,000	9,765	A	13,005	A
Monterey Street, Luchessa Ave to US 101	4-Lane Divided Arterial	29,000	14,500	A	28,060	C

Note: [1] Roadway type of Luchessa Avenue based on classification in 1998 and 1999 Cityof Gilroy Traffic Monitoring Program reports. Monterey Street roadway type based on field observations.
[2] Vehicles per day.
LOS deficiencies are indicated in **bold**. Mitigated LOS shown in parentheses.

Two-Lane Highway Segment Levels of Service

Level of service calculations were conducted for the segment of SR 152 between US 101 and Frazier Lake Road using traffic volumes estimated for Project Conditions. The calculation sheets are contained in Appendix I. Under both Background and Project Conditions, this segment is projected to operate at LOS E during the AM peak hour and LOS F during the PM peak hour.

Two-Lane Highway Segment Impacts

The impacts of the proposed project were evaluated by comparing the results of the level of service calculations under Project (Buildout) Conditions to the results under Background Conditions. For this analysis, traffic impacts on two-lane highway segment are defined to occur when:

1. The addition of project traffic causes the operating level of a two-lane highway segment to deteriorate from an acceptable level (LOS E or better) under Background Conditions to

an unacceptable level (LOS F); or

2. The number of new trips added by a project to a segment already operating at an unacceptable level under Background Conditions is more than one percent of the segment's capacity.

Since the two-lane highway segment analyzed is outside of the City of Gilroy's limits and General Plan boundary, the VTA's definition of acceptable operating level (LOS E) and significance criteria is used.

The results indicate that the project will have a significant adverse impact on the segment of SR 152 between Llagas Creek and Frazier Lake Road during the PM peak hour. This segment is projected to operate at LOS E during the AM peak hour and LOS F during the PM peak hour under both Background and Project Conditions. The proposed projected is estimated to add 4 trips during the AM peak hour and 20 trips during the PM peak hour to this segment. The capacity of the segment is 2,800 vehicles during the AM peak hour and 2,650 vehicles during the PM peak hour (see Appendix I for calculations). Therefore, the addition of seven of more trips during the AM peak hour and eight or more trips during the PM peak hour would not constitute a significant impact.

Freeway Segment Levels of Service

According to CMP 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. Nearby segments of US 101 were reviewed to determine if a significant amount of project traffic would be added to these freeway segments[5] during the PM peak hour. Capacities of 2,200 vehicles per hour per lane (vphpl) for four-lane segments[6] and 2,300 vphpl for freeway segments with six or more lanes were used in the analysis. Table 13 presents the capacities of each segment, the estimated number of trips added to each segment by the proposed development during the PM peak hour, and whether or not the freeway segment must be evaluated in greater detail.

[5]The segment of US 101 south of Monterey Street is a conventional highway (not freeway). The CMP TIA guidelines do not specify a methodology for the analysis of multi-lane highway segments. Therefore, the freeway segment methodology was used to approximate the operating conditions on this segment.

[6]The *1994 Highway Capacity Manual* indicates a capacity of 2,200 vphpl for multi-lane highway segments (assuming a design speed 60 miles per hour).

Table 13
Freeway Segment Analysis Requirement Determination (PM Peak Hour)

Segment	Capacity[1]	1% of Capacity	Project Trips[2]	Requires Analysis?
Northbound US 101, Monterey Street to Leavesley Road	6,900	69	224	Yes
Southbound US 101, Leavesley Road to Monterey Street	6,900	69	219	Yes
Northbound US 101, SR 25 to Monterey Street	4,400	44	139	Yes
Southbound US 101, Monterey Street to SR 25	4,400	44	147	Yes

Notes: 1 A capacity of 2,200 vehicles per hour per lane was used for four-lane highway segments, while a capacity of 2,300 vehicles per hour per lane was used for freeway segments with six or more lanes.
2 Greatest number of project trips added at any one location within this segment.

The project is estimated to add traffic that will exceed one percent of the capacity to all four of the nearby freeway segments. Table 14 presents the levels of service of these segments with the addition of project-generated traffic. All of the segments are projected to operate at LOS B or C during the PM peak hour, acceptable levels of service. Therefore, the project impact on these segments is less than significant.

Left-Turn Pocket Storage and Queuing Analysis

Queuing analyses were conducted at four key intersections. The analysis looked at the potential for queues in the through lanes to spill back from one traffic signal to an upstream intersection. Left-turn pockets on intersection approaches to which the proposed project is projected to add a significant number of vehicles were also evaluated. Six locations were analyzed:

- Monterey Street/Luchessa Avenue (northbound)
- Monterey Street/Farman Frontage Road (northbound)
- Monterey Street/US 101 Southbound ramps (northbound)
- Monterey Street/US 101 Southbound ramps (southbound)
- Monterey Street/US 101 Northbound ramps (northbound)
- Monterey Street/US 101 Northbound ramps (southbound)

TRAFFIX was used to calculate the design (95th percentile) queues. The queuing analysis indicated that the estimated queue lengths would extend past the existing left-turn storage pockets for the

northbound left-turn movement at Monterey Street and Luchessa Avenue and the northbound left-turn movement at Monterey Street and Farman Frontage Road with the addition of project traffic during the PM peak hour However, with implementation of the intersection mitigation measures, the left-turn queues would be accommodated.

Table 14

Project Freeway Segment Analysis (PM Peak Hour)

				Existing Conditions[1]					Project Conditions			
				Average					Project			
Freeway	Study Segment	CMP Segment[2]	Direction	Lanes	Speed	Volume	Density	LOS[3]	Trips	Density	LOS	% Impact
101	Monterey to Leavesley	Tenth to Leavesley	NB	3	65	2,510	12.9	B	224	14.0	B	3.25%
101	Leavesley to Monterey	Leavesley to Tenth	SB	3	65	2,330	12.0	B	219	13.1	B	3.17%
101	SR 25 to Monterey	SR 25 to Tenth	NB	2	65	1,550	10.6	B	139	13.0	B	3.02%
101	Monterey to SR 25	Tenth to SR 25	SB	2	65	2,210	15.1	B	147	18.1	C	3.20%

Notes:

1 Lanes, volume, speed, and density from VTA 1998 CMP Monitoring Data. (These segments were not monitored in the *2000 CMP Monitoring and Conformance Report.*)

2 Segment contained in *1998 CMP Monitoring and Conformance Report* that was used to estimate operating conditions on the study segment.

3 LOS based on density presented in CMP monitoring report.

CHAPTER 5 - CUMULATIVE CONDITIONS

This chapter presents the results of the level of service calculations under Cumulative Conditions. Cumulative Conditions are defined as existing volumes plus traffic generated by approved but not yet constructed developments in the project study area, plus traffic generated by the proposed project, plus traffic associated with other proposed but not approved developments in the study area.

Cumulative Traffic Estimates

Traffic volumes for Cumulative Conditions were estimated by adding traffic associated with pending developments to traffic volumes estimated for Project Conditions. There are nine pending developments in the study area including the Glen Loma Specific Plan (670 homes and 360 apartments) and the South Valley Technology Park. The pending developments are presented in Table C-1 (Appendix C). Traffic volumes for these developments were estimated in a manner similar to the traffic projections for approved developments. Trip generation rates were obtained from ITE *Trip Generation* (see Table C-1). Peak-hour trips were assigned to the roadway network based on existing travel patterns, relative locations of complementary land uses, and trip distribution patterns contained in the Gilroy traffic monitoring program TRAFFIX model.[1]

Cumulative Intersection Levels of Service

The operations of the key intersections were evaluated with level of service calculations. The results are presented in Tables 15a and 15b for signalized and unsignalized intersections, respectively. The intersection of Monterey Street and Farman Frontage Road, at which a traffic signal is proposed as part of the Gilroy Sports Park, was assumed to be signalized under Cumulative Conditions. In addition, the City is also planning to signalized the Princevalle and Luchessa Avenue intersection when traffic signal warrants are met. Therefore, this intersection was also assumed to be signalized under Cumulative Conditions. All of the other study intersections used existing lane configurations.

Under Cumulative Conditions, the intersection of Monterey Street and Luchessa Avenue is projected to operate at LOS F during the PM peak hour and the intersection of Monterey Street and Farman Frontage Road is projected to operate at LOS F during the PM and Saturday peak hours. These intersections are projected to operate at LOS C during the AM peak hour. The Monterey Street intersections at US 101 southbound ramps and US 101 northbound ramps are projected to continue to operate at LOS B or C during both the AM and PM peak hours. The intersection of Santa Teresa Boulevard and Thomas Road is projected to continue to operate at LOS B or C during both the AM,

[1]It should be noted that the Saturday peak hour traffic estimates assume that all the uses included in the approved and cumulative developments, as well as the proposed project, peak at the same time, resulting a conservatively high estimate of Saturday peak-hour volumes.

PM, and Saturday peak hours. The signalized intersection of Luchessa Avenue and Princevalle Street is projected to operate at an acceptable LOS B during AM, PM, and Saturday peak hours.

Table 15a

Cumulative Signalized Intersection Levels of Service

Intersection	Peak Hour	Average Intersection Delay [1]	LOS [2]
Luchessa Avenue and Princevalle Street	AM	6.9	B+
	PM	5.9	B+
	Sat	5.7	B+
Monterey Street and Luchessa Avenue	AM	**>120** (21.2)	**F** (C)
	PM	**>120** (23.0)	**F** (C)
Monterey Street and Farman Frontage Road	AM	12.4 (9.8)	B (B)
	PM	**>120** (19.0)	**F** (C)
	Sat	**>120** (17.5)	**F** (C)
Monterey Street and Southbound US 101 Ramps	AM	16.0	C+
	PM	17.2	C
Monterey Street and Northbound US 101 Ramps	AM	20.9	C
	PM	21.8	C
Santa Teresa Boulevard and Thomas Road	AM	25.0	C-
	PM	20.4	C
	Sat	18.7	C

Notes: [1] Whole intersection weighted average delay expressed in seconds per vehicle.
[2] LOS calculations performed using the approved CMP level of service analysis program, TRAFFIX, which is based on the *1985 Highway Capacity Manual* delay methodology for signalized intersections.
[3] Volume-to-capacity ratio exceed 2.0. Average stopped delay cannot be calculated.
LOS deficiencies are indicated in **bold**. Mitigated LOS shown in parentheses.

The intersections that are projected to operate at unacceptable levels under Cumulative Conditions were also evaluated with the improvements identified to mitigate project impacts. The improvements identified to mitigate project impacts at the Monterey Street/Luchessa Avenue intersection would improve Cumulative operations to LOS E during the AM peak hour and remain at LOS F during the PM peak hour. In addition to some of the General Plan improvements at this intersection which includes three southbound through lanes on Monterey Street, two westbound left-turn lanes, and separate westbound through and right-turn lanes on Luchessa Avenue, the provision of a northbound free right-turn would be needed to improve the operations to LOS C during both peak hours. The Monterey Street/Farman Frontage Road intersection operations are projected to improve to LOS B during the AM peak hour and LOS C during the PM and Saturday peak hours with the identified project mitigation.

Table 15b

Cumulative Unsignalized Intersection Levels of Service

Intersection	Peak Hour	Intersection Average Delay[1]	Intersection LOS[2]	Worst Case Movement Average Delay[1]	Worst Case Movement LOS[2]
Luchessa Avenue and Church Street	AM	**>120** (9.6)	**F** (B)	**>120**	**F**
	PM	**>120** (23.7)	**F** (C-)	**>120**	**F**
	Sat	**>120** (8.9)	**F** (B)	**>120**	**F**

Notes: [1] Average total intersection delay for unsignalized intersection expressed in seconds per vehicle.
[2] LOS calculations performed using TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections.
LOS deficiencies are indicated in **bold**. Mitigated LOS shown in parentheses.

Overall intersection operations at the Luchessa Avenue/Church Street intersection are projected to be LOS F during the AM, PM, and Saturday peak hours. The worst case approach is projected to operate at LOS F during the AM, PM, and Saturday peak hours. The project mitigation of installing a traffic signal would improve the operations to LOS C or better.

Cumulative Roadway Segment Levels of Service

Roadway segment operations with projected Cumulative Conditions volumes are presented in Table 16. One of the four key roadway segments, Monterey Street between Tenth Street and Luchessa Avenue is projected to continue to operate at acceptable levels (LOS C or better). The segments of Luchessa Avenue between Thomas Road and Princevalle Street and Monterey Street between Luchessa Avenue and US 101 would deteriorate to LOS D with the addition of traffic from pending developments. The segment of Luchessa Avenue between Monterey Street and Princevalle Street is projected to deteriorate to LOS F with the addition of traffic associated with pending developments (from LOS A under Existing and Background Conditions and LOS E under Project Conditions).

The widening of the Luchessa Avenue to four lanes would improve the operations to an acceptable level. The widening of Monterey Street south of Luchessa Avenue to six lanes would also improve the operations of this segment to an acceptable level. The General Plan includes widening of Luchessa Avenue and Monterey Street south of Luchessa Avenue to six lanes.

Table 16

Cumulative Roadway Segment Levels of Service

Segment	Roadway Type[1]	LOS C Volume Threshold (vpd[2])	Weekday Daily Volume[2]	LOS
Luchessa Avenue, between Thomas Road and Princevalle St.	2-Lane Arterial	14,500	**15,430**	**D** (A)
Luchessa Avenue, between Princevalle St. and Monterey St.	2-Lane Arterial	14,500	**20,575**	**F** (A)
Monterey Street, between Tenth St. and Luchessa Ave.	4-Lane Divided Arterial	29,000	15,860	A
Monterey Street, between Luchessa Ave and US 101	4-Lane Divided Arterial	29,000	**31,800**	**D** (A)

Note:[1] Roadway type of Luchessa Avenue based on classification in 2001 City of Gilroy Traffic Monitoring Program report. Monterey Street roadway type based on field observations.
[2] Vehicles per day.
LOS deficiencies are indicated in **bold**. Mitigated LOS shown in parentheses.

Cumulative Two-Lane Highway Level of Service

Levels of service were calculated for the AM and PM peak hours using traffic volumes projected for Cumulative Conditions. The results indicate that the segment of SR 152, east of Llagas Creek, will degrade to operate at LOS F during the AM peak hour and will continue to operate at LOS F during the PM peak hour with the addition of traffic associated with cumulative developments (see Appendix I). Widening of this segment would be necessary to improve the level of service.

CHAPTER 6 - GENERAL PLAN BUILDOUT CONDITIONS

This chapter presents the results of the level of service calculations under General Plan Buildout Conditions.

General Plan Buildout Traffic Estimates

Traffic volumes for this scenario are based on traffic volume forecasts prepared for the current General Plan Update by Higgins Associates and from the *South Valley Technology Park Traffic Impact Analysis Report* (Higgins Associates, December 12, 2001). The daily volumes projected for the General Plan buildout alternative (2020) were compared to the daily base year (1997) volumes from the General Plan update analysis to develop growth factors. These growth factors were applied to the existing (2001) turning-movement volumes at the key intersections to expand the volumes to Year 2020. In general, growth factors were developed on an intersection approach by approach basis and ranged from 1.0 on Princevalle Street to 5.9 on the east approach of the Luchessa Avenue/Monterey Street intersection. Traffic projections for the south approach of the Luchessa Avenue/Church Street intersection and the west approach of the Monterey Street/Farman Frontage Road intersection, which will primarily serve the proposed project, were obtained from the Project Conditions scenario. Roadway segment volumes were obtained, where available, directly from the General Plan update projections for buildout conditions.

General Plan Buildout Intersection Levels of Service

The operations of the key intersections were evaluated with level of service calculations. Intersection improvements that are included in the City of Gilroy General Plan were assumed to be in place. The lane configurations with these improvements are shown on Figure 10. The LOS calculation results are presented in Tables 17a and 17b for signalized and unsignalized intersections, respectively.

Table 17a

General Plan Buildout Signalized Intersection Levels of Service

Intersection	Peak Hour	Average Intersection Delay[1]	LOS[2]
Luchessa Avenue and Princevalle Street	AM	8.8	B
	PM	6.3	B+
	Sat	8.1	B
Monterey Street and Luchessa Avenue	AM	**>120** (21.9)	**F** (C)
	PM	**76.2** (24.9)	**F** (C-)
Monterey Street and Farman Frontage Road	AM	**51.0** (13.7)	**E** (B-)
	PM	**>120** (21.8)	**F** (C)
	Sat	****[3] (24.9)	**F** (C-)
Monterey Street and Southbound US 101 Ramps	AM	17.7	C
	PM	23.9	C-
Monterey Street and Northbound US 101 Ramps	AM	**34.4** (22.9)	**D** (C)
	PM	**27.2** (24.0)	**D+** (C-)
Santa Teresa Boulevard and Thomas Road	AM	19.9	C
	PM	16.5	C+
	Sat	17.0	C+

Notes: [1] Whole intersection weighted average delay expressed in seconds per vehicle.
[2] LOS calculations performed using the approved CMP level of service analysis program, TRAFFIX, which is based on the *1985 Highway Capacity Manual* delay methodology for signalized intersections.
[3] Volume-to-capacity ratio exceed 2.0. Average stopped delay cannot be calculated.
LOS deficiencies are indicated in **bold**. Mitigated LOS shown in parentheses.

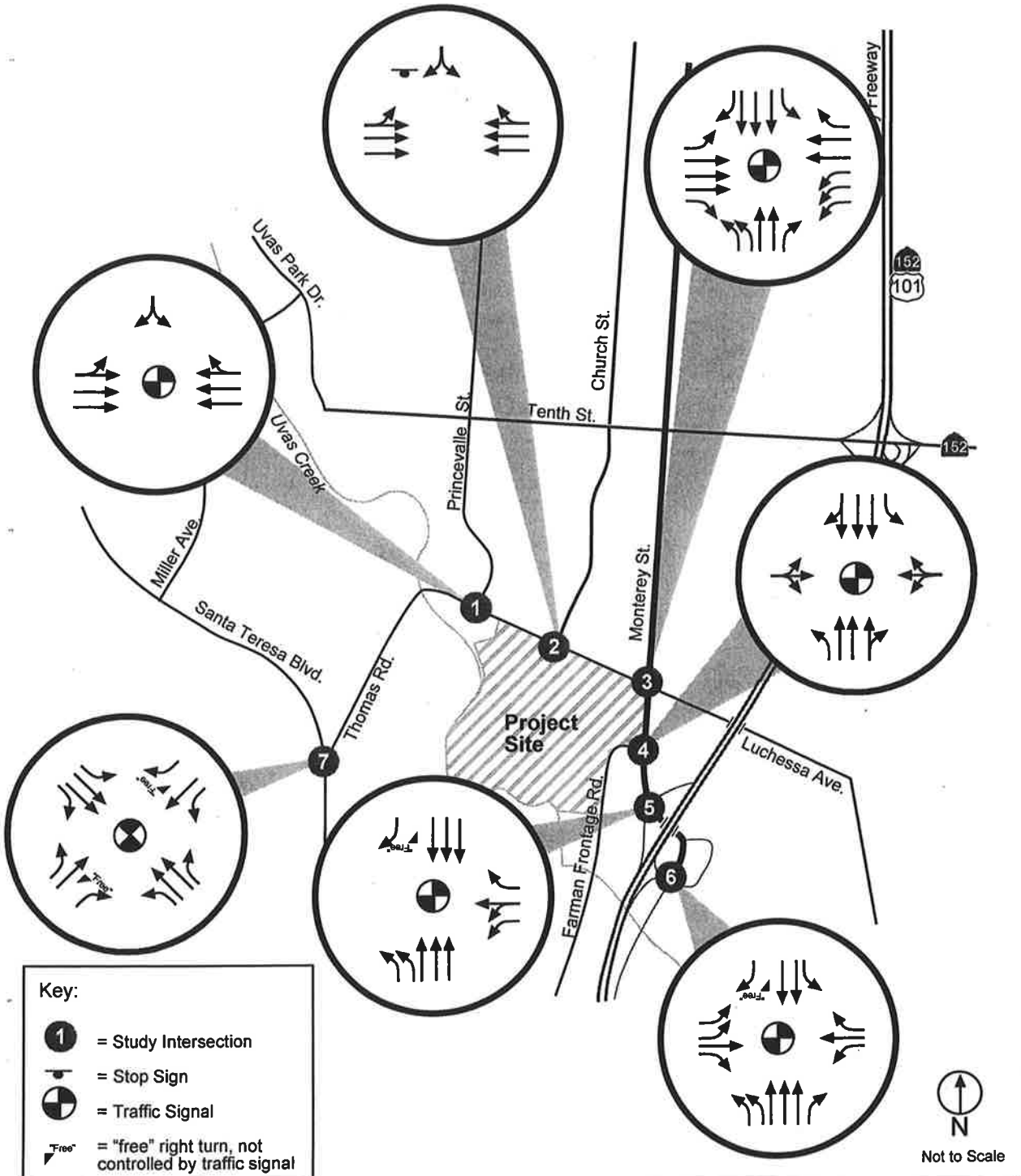


Figure 10
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INTERSECTION LANE CONFIGURATIONS AT GENERAL PLAN BUILDOUT

Table 17b

General Plan Buildout Unsignalized Intersection Levels of Service

Intersection	Peak Hour	Intersection		Worst Case Movement	
		Average Delay[1]	LOS [2]	Average Delay[1]	LOS [2]
Luchessa Avenue and Church Street	AM	**>120** (17.3)	**F** (C)	**>120**	**F**
	PM	**>120** (14.0)	**F** (B-)	**>120**	**F**
	Sat	**72.4** (15.6)	**F** (C+)	**>120**	**F**

Notes: [1] Average total intersection delay for unsignalized intersection expressed in seconds per vehicle.
[2] LOS calculations performed using TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections.
LOS deficiencies are indicated in **bold**. Mitigated LOS shown in parentheses.

The results indicate that, with the (General Plan) planned lane configurations, the signalized intersection of Luchessa Avenue and Monterey Street will operate at LOS F during the AM peak hour and LOS D during the PM peak hour, unacceptable levels. The Monterey Street/Farman Frontage Road intersection is also projected to operate at unacceptable levels: LOS E during the AM peak hour and LOS F during the PM and Saturday peak hours. The intersection of Monterey Street and the southbound US 101 ramps is projected to operate at LOS C during the AM and PM peak hours. The intersection of Monterey Street and the northbound US 101 ramps is projected to degrade to an unacceptable LOS D during the AM peak hour and continue to operate at an acceptable LOS C during the PM peak hour. The intersection of Santa Teresa Boulevard and Thomas Road is projected to continue to operate at an acceptable LOS C during the AM, PM and Saturday peak hours. The signalized intersection of Luchessa Avenue and Princevalle Street would operate at acceptable levels of service during the AM, PM, and Saturday peak hours.

The unsignalized intersection of Luchessa Avenue and Church Street is projected to operate at overall LOS F during the AM, PM, and Saturday peak hours, with the worst case approach also operating at an unacceptable level.

The intersections that are projected to operate at unacceptable levels under General Plan Buildout Conditions were also evaluated with the improvements identified to mitigate project impacts. The improvements recommended to mitigate project impacts at the one unsignalized intersection, Luchessa Avenue and Church Street, would restore intersection operations to acceptable levels with the General Plan Buildout projections. With traffic signal installation and the provision of left-turn pockets on the eastbound and westbound approaches (project mitigation), the intersection of Luchessa Avenue and

Church Street is projected to operate at LOS B during the AM, PM and Saturday peak hours with the projected General Plan Buildout volumes and Luchessa Avenue roadway widening.

The improvements identified to mitigate project impacts at the Monterey Street/Luchessa Avenue intersection would improve General Plan Buildout operations to LOS D during both the AM and PM peak hours. To attained LOS C operations, the provision of a northbound free right-turn and an overlap phase (right-turn arrow) for the westbound right-turn movement would be needed.

Monterey Street/Farman Frontage Road intersection operations are projected to improve to LOS C during the AM, PM and Saturday peak hours with the identified project mitigation.

The intersection of Monterey Street with the northbound US 101 ramps is projected to operate at an unacceptable LOS D during the AM and PM peak hours with the estimated General Plan Buildout traffic volumes. The proposed project is estimated to have a less-than-significant impact on this intersection, and therefore, no project mitigation measures were identified at this location. Intersection operations under General Plan Buildout Conditions would be improved to LOS C by re-striping the eastbound approach (the US 101 off-ramp) to permit left turns from the existing through only lane. The resulting lane configuration on this approach would be two exclusive left-turn lanes, one shared through and left-turn lane, and one right-turn lane. Intersection operations are projected to be LOS C during both the AM and PM peak hours with this striping revision. Alternatively, the City is proposing to lower the LOS standard for the US 101 ramp intersections with Monterey Street to LOS D with the proposed General Plan. With this LOS standard change, this intersection would operate at acceptable levels of service without the striping revision.

General Plan Buildout Roadway Segment Levels of Service

The General Plan includes roadway widening on three of the four key roadway segments. Monterey Street, south of Luchessa Avenue, and both study segments of Luchessa Avenue will be widened to six lanes. With these roadway improvements, all four of the key segments will operate at acceptable levels with General Plan Buildout projections.

Table 18

General Plan Buildout Roadway Segment Levels of Service

Segment	Roadway Type[1]	LOS C Volume Threshold	Weekday Daily Volume[2]	LOS
Luchessa Avenue, between Thomas Road and Princevalle St.	6-Lane Divided Arterial	43,000	16,000	A
Luchessa Avenue, between Princevalle St. and Monterey St.	6-Lane Divided Arterial	43,000	22,000	A
Monterey Street, between Tenth St. and Luchessa Ave.	6-Lane Divided Arterial	43,000	23,000	A
Monterey Street, between Luchessa Ave and US 101	6-Lane Divided Arterial	43,000	36,000	B

Note: [1] Based on General Plan improvements.
[2] Traffic volumes taken directly from General Plan Update Year 2020 projections, except for the segment on Luchessa Avenue, between Thomas Road and Princevalle Street, which is estimated based on estimated volumes and growth factors derived from General Plan traffic forecasts.

General Plan Buildout Two-Lane Highway Segment Level of Service

Under General Plan Buildout Conditions, SR 152 between US 101 and Frazier Lake Road was assumed to be widened and have traffic signals installed. Therefore, this segment will no longer function as two-lane highway. Its operation will be constrained by the operations of the signalized intersections. The General Plan Buildout analysis included in the Gilroy Retail Center TIA indicates that SR 152 (Pacheco Pass Highway) will operate at LOS C or better during both peak hours.

CHAPTER 7 - SITE ACCESS AND SITE PLAN REVIEW

This chapter discusses issues associated with the proposed site plans for the Gilroy Sports Park and the residential component of the project. Site access, parking, and on-site circulation for the sports park were reviewed in detail for the January 1999 Gilroy Sports Park TIA. Park access in the context of the currently proposed project (with development on the USA amendment parcels) is discussed in this chapter. The recommendations of the previous review of parking and on-site circulation for the sports park are also presented. Currently, specific projects have not been proposed for the residential or commercial parcels, and therefore, site plans are not available for review. However, general site access issues for the commercial and residential parcels are discussed.

Gilroy Sports Park

Site access, on-site circulation, and parking were reviewed in detail in the January 1999 TIA for the sports park. An updated review is presented in the following sections. The sports park site plan is illustrated on Figure 3.

Site Access

Vehicular Access

The Gilroy Sports Park will be served by one driveway on Farman Frontage Road. The intersection of the driveway with Farman Frontage Road will be controlled by a stop sign on the driveway approach. During the worst case peak hour on a Saturday, 400 vehicles are projected to exit the site during one hour. Under conditions with completion of the sports park alone, the intersection of the driveway with Farman Frontage Road is projected to operate at acceptable levels—overall LOS A operations with LOS B operations for the park driveway approach due to the low volumes along Farman Frontage Road. However, with buildout of the commercial parcels, the overall operation of this intersection will deteriorate to LOS F during the Saturday peak hour and the worst case movement, the left-turn from the sports park driveway, will operate at LOS F during the PM and Saturday peak hours. The Caltrans Peak Hour Volume warrant requirements are satisfied with the project estimated buildout traffic volumes during the PM and Saturday peak hours. (See Appendix F for level of service calculation sheets and the signal warrant analysis worksheet.) This intersection should be monitored and a traffic signal installed, if warranted, with buildout of the commercial parcels. It is recommended that this intersection be designed and constructed to accommodate the possible signal installation.

Entry to the park will be controlled by a cashier at the entry building located approximately 500 feet from intersection of the park entry road with Farman Frontage Road. A flat parking fee would be charged to vehicles entering the park with some park users (such as tournament players and members

of league teams) using passes provided in advance. The hourly design capacity for a parking entrance with a cashier and a flat fee is approximately 300 vehicles per hour per entry lane (vphpl). The project proposes to have at least two entry lanes. The highest inbound volume to the park is expected to occur during the Saturday peak hour. The estimated hourly peak volume is 400 vehicles. The 95th percentile queue was calculated using a Poisson distribution, a capacity of 300 vphpl, two entry lanes, and a peak volume of 400 vph (see Appendix F). The results indicate that the maximum queue would be approximately 175 feet in each of two lanes. The 500-foot storage length would be sufficient to serve this queue.

Two turn around areas are provided along the entry road: one between the park gates and Farman Frontage Road and a second west of the entry building. These locations will allow vehicles arriving after the park has closed (or drivers wishing to exit for other reasons) to make U-turns and exit the park.

Pedestrian Access

As part of the sports park component of the project, six-foot wide sidewalks are proposed to be constructed along the west side of Farman Frontage Road between Monterey Street and the park entrance and along the west side of Monterey Street between Luchessa Avenue and Farman Frontage Road. A crosswalk is proposed across the north leg of the Monterey Street/Farman Frontage Road intersection. It is recommended that the crosswalk across Monterey Street at Farman Frontage Road not be provided until the traffic signal is installed at this intersection.

Project-sponsored improvements along Monterey Street should be coordinated with the city's recent improvements to the intersection of Monterey Street/Luchessa Avenue. (A traffic signal was constructed in Fall 1999.) City standards require 10-foot sidewalks along Monterey Street. (The site plan shows six-foot sidewalks.) In addition, it is recommended that the sidewalks along Monterey Street be installed when the other improvements (i.e., the installation of the traffic signal) occur at the Monterey Street/Farman Frontage Road intersection prior to the completion of Phase III of the sports park. During earlier phases pedestrian and bicycle access will be provided via the Uvas Creek Trial, which links the park to the residential neighborhood to the north and is, therefore, likely to carry the majority of pedestrian traffic to the site.

Uvas Creek Trail

The project proposes to extend the Uvas Creek Trail from Luchessa Avenue through the sports park and then southward to Gavilan College. The trail extension will allow pedestrians and bicyclists to access the sports park from Luchessa Avenue and the neighborhoods to the north. The ultimate trail connection at Luchessa Avenue is an under-crossing at the bridge located west of Princevalle Street. It is planned but is not proposed as part of the sports park project. The proposed near-term trail

crossing of Luchessa Avenue is an at-grade crossing located at the intersection of Luchessa Avenue with Princevalle Street. Improvements will be constructed along both the north and south sides of Luchessa Avenue to continue the pedestrian/bicycle trail between the Uvas Creek and the Luchessa Avenue/Princevalle Street intersection.

The intersection of Luchessa Avenue at Princevalle Street is a T-intersection and is controlled by a stop sign on the Princevalle Street (southbound) approach. The installation of traffic signals, crosswalks, and stop signs on all approaches to support of the near-term Uvas Creek Trail connection were investigated. (The ultimate trail connection via the future under-crossing of the Luchessa Avenue bridge is the recommended pedestrian and bicycle facility.)

Due to travel speeds along Luchessa Avenue (in excess of 40 mph), crosswalks are not recommended without the protection of traffic signals with pedestrian heads for pedestrian crossing or all-way stop sign control (stop signs on all three intersection approaches). The installation of signals were investigated via Caltrans traffic signal warrants. The vehicular volumes projected after the completion of the sports park do not satisfy the Peak Hour Volume Warrant requirements (see Appendix E). Caltrans' "Warrant 3 - Minimum Pedestrian Volume" for traffic signal installation requires a pedestrian volume crossing the major street of 100 or more for each of any four hours or 190 or more during any one hour during an average day.[2] Data provided in the Santa Clara County Countywide Trails Master Plan (July 1995) indicates that usage of the Uvas Creek Trail (measured at Miller Avenue) was about 260 persons on a Saturday and 150 persons on a Tuesday in May 1994. The most likely users of the trail for park access will be residents living in the neighborhoods immediately north of Thomas Road/Luchessa Avenue. As shown on Figure 6, five percent of the project-generated traffic is estimated to originate or be destined for this area. Assuming a vehicle occupancy of 2.0 persons per vehicle, 80 person-trips during the Saturday peak hour and 55 person-trips during the PM peak hour would be generated by these neighborhoods. This projection does not meet the minimum volume required. Therefore, signals are not recommended in the near-term.

It is recommended that this location be monitored for both vehicular and pedestrian/bicycle volumes, and an all-way stop or traffic signals (with pedestrian heads) be installed if warrant requirements are met. As discussed in Chapter 4, with buildout of the project (and in particular, the commercial parcels), signalization of this intersection is recommended to mitigate project impacts. Under Project Buildout Conditions, the Caltrans Peak Hour Volume Warrant is satisfied with both the projected PM and Saturday peak-hour volumes.

[2] In addition to the minimum pedestrian volume, less than 60 gaps per hour in the traffic stream of adequate length for pedestrians to cross during the same time period must be observed.

Transit Access

The project master plan indicates that the VTA will extend bus service to serve the sports park. City staff has indicated that the VTA will extend service when other development in this area (including hotels and other commercial uses along Monterey Street) generate sufficient demand for bus service.

The site plan shows a bus stop and turn around area on Farman Frontage Road south of the project entrance. This bus stop and turn around should be designed to VTA standards. Pedestrian access should be provided from the bus stop to the park, including a sidewalk along Farman Frontage Road that connects to the internal pedestrian paths.

On-Site Circulation

On-site circulation for the sports park was reviewed and generally found to be adequate. Pedestrian paths and sidewalks are located throughout the park and provide adequate internal pedestrian circulation and connections to the Uvas Creek Trail and Farman Frontage Road. Pedestrians paths along the perimeter of the park are 12 feet wide and double as emergency vehicle access roadways.

Some recommended improvements for vehicular circulation are listed below. Sketches illustrating the changes are included in Appendix G.

- The outbound lanes of the entry road near Farman Frontage Road should be narrowed to one lane with paint to allow two outbound lanes (with park personnel directing traffic), if needed.

- All-way stop sign control is recommended at the intersection of the entry road and the main north-south road. All-way stop sign control will provide safer conditions for pedestrians crossing this intersection.

- It is recommended that the first driveway on the entrance road (closest to Farman Frontage Road) be widened to allow both inbound and outbound traffic and the landscape median along the entry road be cut back to allow left turns from this parking area onto the entry road. Currently, the on-site traffic is concentrated at the intersection of the entry road and the main north-south circulation road. Allowing left turns out of the eastern most driveway will diffuse some of this traffic. Landscaping in the median should be low (two to 2.5 feet in height) or taller trees with thin trunks, which should be pruned to maintain adequate sight distance.

- The provision of an additional north-south circulation aisle in the western most parking area is recommended to break up the long rows of parking spaces. In addition, the parking bays and

circulation aisles should be extended eastward, eliminating the isolated landscaped barrier at the east end of the parking area.

Parking

The parking demand was estimated in a manner similar to trip generation, based on the planned operation of the sports park and assumptions regarding numbers of persons per vehicle for the different uses within the park. The parking demand estimates by phase are presented in Table 19. Details of the parking estimate calculations are contained in Appendix H. The parking demand after buildout of the park is estimated be 996 parked vehicles.

The recommended parking supply is the parking demand plus five percent to account for circulating vehicles. Therefore, the recommended parking supply for the Gilroy Sports Park is 1,047 parking spaces. The recommended parking supply by phase is presented in Table 19.

The site plan (date June 16, 1998) includes 1,049 parking spaces, which will adequately serve the projected demand. Table 19 presents a comparison of the recommended parking supply by phase to the proposed parking supply by phase. A shortfall is projected to occur after the completion of Phase V. It is recommended that 180 of the 298 parking spaces that will be constructed with Phase VI be constructed instead with Phase V to offset the projected shortfall.

Table 19

Parking Demand and Supply Summary

Sports Park Phase	Cumulative Estimated Demand	Cumulative Supply		
		Recommended	Provided	Difference
I	0	0	117	+117
II	196	206	278	+72
III	326	343	439	+96
IV	606	637	751	+114
V	886	931	751	-180
VI & VII	996	1047	1049	+2
VIII & IX	996	1047	1049	+2

The City of Gilroy Zoning Ordinance does not include an off-street parking requirement for ball parks. The most similar land use included in the ordinance is a theater or auditorium with fixed seats. The parking requirement for this land use is one parking space per four seats or seven feet of bench space. The sports park will have approximately 300 feet of bench space for each of the 13 ballfields, for a total of 3,900 feet of bench. The required off-street parking supply would be 558 spaces. The proposed 1,049 parking spaces would be sufficient to meet this requirement.

Residential Development

A specific project for the residential parcels is not proposed at this time, therefore, a site plan has not been developed for the residential parcels. Only a general review of site access was conducted. A detailed review of the site plan should be conducted when a specific project is proposed to ensure adequate access, circulation, and parking are provided.

Access to the residential parcels was assumed to be provided via two new public streets that will intersect with Luchessa Avenue and one new public street that will intersection with Monterey Street. The intersection at Monterey Street will be restricted to right turns only (due to the existing raised median on Monterey Street). These new residential streets are projected to serve 31 to 56 vehicles during a peak hour at their intersections with Luchessa Avenue, while the site roadway that intersects with Monterey Street will serve 16 to 18 peak-hour vehicles. The number of access locations is adequate to serve the estimated project-generated traffic.

The intersection of the western residential site roadway with Luchessa Avenue was assumed to form the south leg of the existing Luchessa Avenue/Church Street intersection. This intersection is a key study intersection and was evaluated with LOS calculations. Overall intersection operations are projected to deteriorate to LOS F during the PM and Saturday peak hours under Project Buildout Conditions. The installation of a traffic signal at this intersection was recommended to mitigate project impacts. (Caltrans Peak Hour Volume warrant requirements are satisfied with the estimated PM and Saturday peak-hour volumes under Project Buildout Conditions.) Level of service results indicate that with signalization this intersection would operate at LOS B during the AM, PM, and Saturday peak hours.

Commercial Parcels

A specific commercial development is not proposed at this time, and a site plan has not been developed for the commercial parcels. Therefore, only a general review of site access was conducted. A detailed review of the site plan should be conducted when a specific project is proposed to ensure adequate access, circulation, and parking are provided.

For the purposes of this analysis, it was assumed that access to the commercial parcels would be provided via one right-turn only driveway on Monterey Street (serving the northern commercial parcels) and two full access driveways on Farman Frontage Road (one each serving the northern and southern commercial areas).

The right-turn driveway on Monterey Street is projected to serve 316 inbound trips and 158 outbound trips during the Saturday peak hour (the study period with the greatest retail trip generation). A right-turn lane on Monterey Street would be recommended to serve the projected inbound traffic volume. The TRAFFIX projected design queue in the southbound right turn lanes at the Monterey Street/Farman Frontage Road intersection with the recommended project mitigation (including the provision of southbound two right-turn lanes) is 300 feet. The commercial frontage along Monterey Street extends approximately 400 feet north of this intersection. Therefore, the right-turn pocket lanes are likely to extend past the shopping center driveway, and at times of peak demand, the southbound right-turn queue from the Farman Frontage Road/Monterey Street intersection could block the driveway (depending upon the location of the driveway in relation to the intersection). This could result in additional traffic being added to Farman Frontage Road and the west leg of the Farman Frontage Road/Monterey Street intersection.

The northern full access driveway on Farman Frontage Road was assumed to be controlled by a stop sign on the shopping center driveway. This intersection is projected to operate at acceptable levels during the AM peak hour and at unacceptable levels during the PM and Saturday peak hours. During the Saturday peak hour 362 vehicles are projected to exit the shopping center via a left turn from this driveway, while during the PM peak hour 296 vehicles are projected to exit. With the estimated volumes on Farman Frontage Road under project buildout, the calculated delay to the outbound left-turn movement is very high, resulting in LOS F operations for this movement. The Caltrans Peak Hour Volume warrant requirements for traffic signal installation are satisfied with the volumes projected for the PM and Saturday peak hours with project buildout. However, the proximity of this driveway to the Farman Frontage Road/Monterey Street intersection and the sports park driveway may make signalization infeasible. As discussed in regard to improvements at the Monterey Street/Farman Frontage Road intersection and the sports park driveway, it may be necessary to realign Farman Frontage Road. This realignment may provide opportunities for improved access to the commercial center.

At the southern full access commercial driveway, 512 inbound and 457 outbound project-generated trips are projected to travel through the driveway intersection during the Saturday peak hour. The conflicting traffic at this intersection is projected to be minimal, and therefore, the driveway is projected to operate at acceptable levels during all study scenarios. However, one access point may not be sufficient for emergency access. When a site plan is proposed, it should be reviewed to ensure adequate emergency access is provided.

CHAPTER 8 - CONCLUSIONS

The proposed Gilroy Sports Park and Urban Services Area amendment is estimated to generate 20,738 new weekday daily trips, 495 AM peak-hour trips (273 inbound/222 outbound), 2,091 PM peak-hour trips (1,019 inbound/1,072 outbound), and 2,851 Saturday peak-hour trips (1,485 inbound/1,366 outbound). The impacts of the proposed development on the surrounding roadway system were evaluated following guidelines of the City of Gilroy and the Santa Clara Valley Transportation Authority (VTA).

Project Intersection Impacts and Mitigation Measures

The level of service calculation results indicate that the project will have a significant adverse impact on four of the seven key intersections:

Luchessa Avenue and Princevalle Street
Luchessa Avenue and Church Street
Monterey Street and Luchessa Avenue
Monterey Street and Farman Frontage Road

Mitigation measures were identified for these intersections. The installation of a traffic signal at the Luchessa Avenue/Princevalle Street intersection would mitigate project impacts to a less-than-significant level.

The traffic signal installation and the provision of left-turn pockets on the eastbound and westbound approaches would mitigate project impacts at the Luchessa Avenue/Church Street intersection.

At the Monterey Street/Luchessa Avenue intersection, the addition of a second northbound left-turn lane and an exclusive eastbound right-turn lane will improve the operation of the Monterey Street/Luchessa Avenue intersections from LOS F to LOS D during the PM peak hour with estimated Project Conditions volumes. In order to further improve operations to LOS C, either a right-turn arrow would need to be provided for the eastbound right-turn movement (so vehicles in this movement could move while the northbound left-turn movement has a green arrow) or the eastbound right-turn movement would need to be removed from the intersection by a pork chop island and controlled by a yield sign.

The currently approved sports park project is required to signalize the intersection of Monterey Street and Farman Frontage Road prior to completion of Phase IV of the park. With installation of the traffic signal, the intersection is projected to operate at LOS C during all three study periods through the final phase of the sports park with the existing lane configuration. With the development of the commercial

parcels, additional turn lanes would be needed to serve traffic entering and exiting the retail uses. Two exclusive southbound right-turn lanes, two northbound left-turn lanes and widening of the eastbound approach would be needed to serve the projected volume. In addition, right-turn arrows would need to be provided for the eastbound and southbound right-turn movements to provide LOS C intersection operations during all three study periods. This lane configuration will require split phase operation of the eastbound and westbound approaches and will require widening of Farman Frontage Road. Some realignment of Farman Frontage Road may be required to provide adequate turning radii as it approaches its intersection with Monterey Street. The feasibility of this improvement is subject to more detailed engineering studies. Without implementation of all the mitigation measures, the project's impact would not be fully mitigated.

Roadway Segment Impact Analysis

The proposed project is estimated to have a significant impact on one of the four key roadway segments, Luchessa Avenue between Princevalle Street and Monterey Street. The remaining segments are projected to continue to operate at LOS C or better with buildout of the project. Widening the segment of Luchessa Avenue between Monterey Street and Princevalle Street from two to four lanes would provide adequate capacity to serve the estimated project buildout traffic volumes and mitigate the project impact. The City's General Plan includes widening of Luchessa Avenue between Chestnut Street and Thomas Road (including the bridge over Uvas Creek) to six lanes.

Two-Lane Highway Segment Impact Analysis

The impact of the proposed project on State Route 152 (Pacheco Pass Highway), east of US 101, was evaluated using the methodology presented in the 1994 *Highway Capacity Manual*. The results indicate that the project would not have a significant impact on the segment of SR 152 between Llagas Creek and Frazier Lake Road. SR 152 is currently being widened between US 101 and Llagas Creek. This segment would operate as a four-lane arterial with these improvements, which include roadway widening, intersection improvements, and a traffic signal at Gilroy Foods.

Project Impact Freeway Analysis

Potential project impacts on area freeway segments were evaluated. The key freeway segments are projected to operate at LOS B and C during the PM peak hour with the addition of project-generated traffic. Therefore, the project is estimated to have a less than significant impact on the nearby segments of US 101 according to the criteria established in the Santa Clara County CMP.

Queuing Analysis

The queuing analysis indicated that the estimated queues for the northbound left-turn movement at Monterey Street and Luchessa Avenue and the northbound left-turn movement at Monterey Street and Farman Frontage Road would extend past the existing left-turn storage pockets for the under Project Conditions. Implementation of the project mitigation measures for these two intersections would accommodate the expected queues.

Sports Park Site Access, On-Site Circulation, and Parking

Site access, on-site circulation and parking were assessed for the sports park. The proposed parking supply of 1,049 was found to be adequate to serve the estimated demand. However, a shortfall is projected to occur after the completion of Phase V. It is recommended that 180 of the 298 parking spaces that will be constructed with Phase VI be constructed instead with Phase V to offset the projected shortfall.

Site Access

Sports park site access was found to be adequate to serve sports park traffic, with sufficient storage provided for queued vehicles between Farman Frontage Road and the main entry building, where a parking fee will be collected. It was recommended that the intersection of the intersection of the sports park driveway with Farman Frontage Road be monitored for possible traffic signal installation after buildout of the commercial parcels. The intersection of the sports park driveway should be designed and constructed to accommodate the possible signal installation.

On-Site Circulation

On-site circulation for the sports park was reviewed and generally found to be adequate. The following recommendations were made:

- The outbound lanes of the entry road near Farman Frontage Road should be narrowed to one lane with paint to allow two outbound lanes (with park personnel directing traffic), if needed.

- All-way stop sign control is recommended at the intersection of the entry road and the main north-south road. All-way stop sign control will provide safer conditions for pedestrians crossing this intersection.

- It is recommended that the first driveway on the entrance road (closest to Farman Frontage Road) be widened to allow both inbound and outbound traffic and the landscape median along the entry road be cut back to allow left turns from this parking area onto the entry road. Currently, the on-site traffic is concentrated at the intersection of the entry road and the main north-south circulation road. Allowing left turns out of the eastern most driveway will diffuse some of this traffic. Landscaping in the median should be low (two to 2.5 feet in height) or taller trees with thin trunks, which should be pruned to maintain adequate sight distance.

- The provision of an additional north-south circulation aisle in the western-most parking area is recommended to break up the long rows of parking spaces. In addition, the parking bays and circulation aisles should be extended eastward, eliminating the isolated landscaped barrier at the east end of the parking area.

Other Access Recommendations

Recommendations were made in regard to other improvements proposed as part of the sports park project, including:

- It is recommended that the crosswalk across Monterey Street at Farman Frontage Road not be provided until the traffic signal is installed at this intersection.

- The proposed Farman Frontage Road bus stop should be designed to VTA standards. Pedestrian access should be provided from the bus stop to along Farman Frontage Road that connects to the internal pedestrian paths.

- The proposed sidewalk along the west side of Monterey Street should connected to signalized intersection of Luchessa Avenue and Monterey Street. It is recommended that the sidewalks along Monterey Street be installed when the Monterey Street/Farman Frontage Road intersection is signalized.

- Due to travel speeds along Luchessa Avenue (in excess of 40 mph), a crosswalk is not recommended without the protection of a traffic signal with pedestrian heads for pedestrian crossing or all-way stop sign control (stop signs on all three intersection approaches). The recommended pedestrian and bicycle facility is the connection of the existing trail north of

Luchessa Avenue with the proposed trail to the south via the future under-crossing of the Luchessa Avenue bridge. It is recommended that this location be monitored for both vehicular and pedestrian/bicycle volumes, and an all-way stop or traffic signals (with pedestrian heads) be installed if warrant requirements are met.

Residential Development Site Access

A general review of site access was conducted for the residential parcels since a specific project is not proposed at this time. It was assumed that access to the residential parcels will be provided via two driveways on Luchessa Avenue and one right-turn only driveway on Monterey Street. Site access was found to be adequate.

Commercial Development Site Access

A specific commercial development is not proposed at this time, and a site plan has not been developed for the commercial parcels. Therefore, only a general review of site access was conducted. A detailed review of the site plan should be conducted when a specific project is proposed to ensure adequate access, circulation, and parking are provided.

Direct access to the commercial parcels was assumed to be provided via one right-turn driveway on Monterey Street and one full access driveway on Farman Frontage Road serving the northern commercial parcels (those located north of the sports park entrance) and at least one full access driveway on Farman Frontage Road serving the southern commercial parcels.

Based on the projected traffic volumes, a southbound right-turn lane is recommended to serve the traffic entering the northern commercial parcels via the Monterey Street driveway. It was noted that the estimated queues on the southbound approach of the Monterey Street/Farman Frontage Road intersection may at times extend back past this driveway blocking the exiting vehicles. This could result in additional traffic being added to Farman Frontage Road and the west leg of the Farman Frontage Road/Monterey Street intersection.

The northern commercial driveway on Farman Frontage Road was assumed to be controlled by a stop sign on the driveway approach and is projected to operate at an acceptable level during the AM peak hour and unacceptable levels during the PM and Saturday peak hours. The Caltrans Peak Hour Volume warrant requirements for traffic signal installation are satisfied with volumes projected for the PM and Saturday peak hours with project buildout. However, the proximity of this driveway to the Farman Frontage Road/Monterey Street intersection and the sports park driveway may make signalization infeasible. As discussed in regard to improvements at the Monterey Street/Farman Frontage Road intersection and the sports park driveway, it may be necessary to realign Farman

Frontage Road. This realignment may provide opportunities for improved access to the commercial center.

The conflicting traffic at the intersection of the southern commercial driveway with Farman Frontage Road is projected to be minimal, and the driveway is projected to operate at acceptable levels during all study scenarios. However, one access point may not be sufficient for emergency access. When a site plan is proposed, it should be reviewed to ensure adequate emergency access is provided.

General Plan Buildout Intersection Recommendations

The improvements recommended to mitigate project impacts at the unsignalized intersection of Luchessa Avenue and Church Street, in combination with the General Plan improvements, would also provide acceptable operating levels under General Plan Buildout Conditions. Additional improvements (over General Plan improvements and project mitigation measures) would be required at the intersections of Luchessa Avenue/Monterey Street, Monterey Street/Farman Frontage Road, and Monterey Street/US 101 northbound ramps to provide acceptable operating levels (LOS C or better) during all of the study time periods (AM, PM, and Saturday peak hours).

Appendix B

Vacant Land Inventory

Background

A city's urban service area (USA) is defined as that area to which the city provides urban services such as water and sewer, or expects to provide these services within five years of the adoption of a capital improvement program. Thus, the USA is expected to accommodate approximately five years of urban development. In Santa Clara County, jurisdictional boundary changes, including USA amendments, are reviewed and acted upon by the Santa Clara County Local Agency Formation Commission (LAFCO). Santa Clara County LAFCO does not generally allow urban development to occur outside established USAs.

The City of Gilroy is requesting an amendment to its existing USA. The Gilroy City Council approved a USA amendment request for a 140.21-acre area south of the City on June 7, 1999 and staff was directed to submit the application to LAFCO. The USA amendment request is officially identified as Gilroy USA Amendment 98-03, and commonly known as the Gilroy Sports Park USA Amendment. LAFCO will generally only accept one USA amendment request per year from each city. The most recent previous USA amendment request was filed in October 1997. In acting upon a USA amendment request, LAFCO requires the preparation of an appropriate environmental review document, a fiscal analysis, and a vacant land analysis of the existing USA.

LAFCO utilizes the vacant land analysis in assessing the need for expansion of the USA, based on a goal of maintaining an approximate five-year supply of developable land within the USA. This vacant land analysis has been prepared to provide this information to LAFCO in their decision on Gilroy USA Amendment 98-03.

The request for Gilroy USA Amendment 98-03 includes 140.21 acres, of which 85.36 is the approved Gilroy Sports Park and Uvas Creek Trail extension, 27.72 acres is proposed for residential development, and 27.13 acres is proposed for general services commercial development.

This vacant land analysis quantifies the amount of vacant land that carries any *Draft 1999-2020 Gilroy General Plan* land use designation of RESIDENTIAL (with any residential zoning), or a *Draft 1999-2020 Gilroy General Plan* land use designation of COMMERCIAL – GENERAL SERVICES and a zoning designation of C-3 (Shopping Center Commercial) or CM (Commercial Industrial), which are the commercial zone districts consistent with the COMMERCIAL – GENERAL SERVICES land use designation. Locations within the existing USA on which development of a sports park is possible are also quantified in the analysis.

Determination of Five-year Supply

A determination of what constitutes a five-year supply of vacant land in Gilroy was established for residential and C-3 and CM commercial development. The method for determining a five-year supply of each of these is outlined below. Since the sports park is a unique use, alternative sites within the USA were determined rather than a five-year supply.

Residential

Residential development in the City of Gilroy is largely controlled through the Residential Development Ordinance (RDO). The RDO sets a 10-year goal of 4,000 residential units. An averaged number of 2,000 units was used as a basis for establishing a five-year supply of residential land.

The Association of Bay Area Governments (ABAG) issues a regional housing needs determination for each City in the greater Bay Area. ABAG has determined that the City of Gilroy should provide 3,677 new housing units from 1999 through 2006. This is an annual average of 490 housing units, or 2,450 units in a five-year period, about 20 percent higher than is expected under the Gilroy RDO.

Commercial

There is no commercial parallel to the RDO. To determine the number of acres required for five typical years of commercial development, City of Gilroy Architecture and Site Approval records were analyzed for the five-year period from July 1994 through June 1999. The total acreage was calculated for commercial projects in the C-3 and CM zones that received Architecture and Site approval during that time span, and were later issued building permits. This acreage figure was used as the basis for a five-year supply of commercial land. Based on this recent five-year sample, the City of Gilroy can expect a demand for 44 acres of C3 and 15 acres of CM designated land over the next five years.

Sports Park

The sports park is a large scale project that will meet the City's organized sports needs for many years. In this regard, the sports park is unique from other parkland, such as neighborhood and community parks. Although the sports park is already approved at the selected site, this analysis looks at alternative sites within the USA that are of suitable size and terrain for placement of a similar facility.

Existing Vacant Land Supply

The survey of vacant land reflects RDO allocations as of April 2000, and for residential properties exempt from RDO, site and architecture approvals thorough December 21, 2001. The survey reflects commercial site and architecture approvals through December 21, 2001.

Residential

The number of probable future dwelling units in the City was calculated. For residential development projects in which a known number of units will be built, information from the City's RDO process was used to determine how many additional RDO allocations will be made. Lands for which an RDO allocation had been granted by the City were considered not to be vacant, although there is a lag period between RDO allocation and construction of houses. Table 1 summarizes the land for which RDO allocations remain available.

TABLE 1

Remaining RDO Allocations of Major Projects

Project Name	Neighborhood	Medium Density	Low Density	Hillside	Hecker Pass
Carriage Hills			75		
Country Estates				94	
Deer Park/ Rancho Hills	118				
Eagle Ridge				134	
Glen Loma	1,159				
Village Green		107			
TOTAL	**1,277**	**107**	**75**	**228**	**0**

Source: City of Gilroy

For other properties, a list of all vacant land with a residential designation under the *Draft 1999-2020 Gilroy General Plan* was compiled. Land that was in rural residential use, but planned for higher densities was considered vacant. The gross acres of residential land was reduced by 25 percent to account for street rights-of-way, park dedications, and other non-residential uses. The number of acres of each land use was multiplied by its average potential density to determine the probable number of dwelling units. The amount of vacant land in each general plan residential category and the potential average build-out is listed in Table 2.

TABLE 2

Vacant Residential Land Within the Existing Gilroy USA

General Plan Designation	Gross Acres Vacant	Net Acres Vacant	Average Net Density Allowed	Potential Units (at average net density)
Neighborhood	181.5	136	9	1,224
Medium Density	16.6	13	12	156
Low Density	87.8	66	5	330
Hillside	51.5	39	2	78
Hecker Pass Area	248.2	186	0.4	74
TOTAL	**585.6**	**490.2**		**1,862**

Note: Excludes lands contained in Table 1.

Source: City of Gilroy

Table 3 summarizes the probable residential build-out within the Gilroy USA.

TABLE 3

Residential Capacity of the Gilroy USA

General Plan Designation	Units from RDO Analysis	Units from Acreage Analysis	Total Units by Land Use	Five-year Supply
Neighborhood	1,277	1,224	2,501	
Medium Density	107	156	263	
Low Density	75	330	405	
Hillside	228	78	306	
Hecker Pass Area	0	74	74	
TOTAL	**1,687**	**1,862**	**3,549**	**2,000**

Note: Five-year supply is based on RDO and goals established by Gilroy City Council.

Source: City of Gilroy

Commercial

A list was compiled of all vacant land within the existing Gilroy USA with a *Draft 1999-2020 Gilroy General Plan* designation of COMMERCIAL - GENERAL SERVICES and one of the two compatible zoning designations: C-3 or CM. Land for which site and

architectural review had been approved, through December 21, 2001, was considered not to be vacant. Land that was in non-structural commercial use, such as pallet storage, was considered vacant. The total amount of land in each of the two commercial categories is listed in Table 4.

TABLE 4

Vacant General Services Commercial Land Within the Existing Gilroy USA

Commercial Zoning	Gross Acres	5-year Supply
C-3	199.2	44
CM	11.7	15
TOTAL	**210.9**	**69**

Note: Five-year supply is based on C-3 and CM zoned Architecture and Site Approvals July 1994-June 1999, for which permits were subsequently issued.

Sports Park

The sports park has several unique siting requirements. The site must be large enough to achieve the goal of providing a centralized sports facility and it must be sufficiently level for development of athletic fields without excessive grading. It should also be well located for local and regional access. The City determined that the city-owned location immediately north of the City limits and USA was the most suitable and approved the Gilroy Sports Park on that site. The City looked at several alternative sites for the sports park. All of these sites are within the existing USA and two are in areas designated in the *Draft 1999-2020 Gilroy General Plan* for residential development. The alternative sites are listed in Table 5.

TABLE 5

Alternative Sports Park Sites Within the Existing Gilroy USA

Location	Gross Area	Draft General Plan Designation	Displaced Residential Units
Bolsa Road	103 acres	Open Space	---
Santa Teresa Blvd. and Miller Avenue	97 acres	Neighborhood District	655
Hwy. 152 west of Santa Teresa Blvd.	120 acres	Hecker Pass Area	36

Note: Displaced residential units is based on net area of the site (25 percent less than gross area) times the net density for the Draft General Plan land use.

Source: City of Gilroy

Discussion

Under the land use designations of the *Draft 1999-2020 Gilroy General Plan*, the City of Gilroy has an approximate nine-year supply of residential land within its existing USA. There is an approximate 23-year supply of COMMERCIAL – GENERAL SERVICES land zoned C-3 and a four-year supply of COMMERCIAL – GENERAL SERVICES land zoned CM. Table 6 summarizes the remaining supply of vacant land.

TABLE 6

Supply of Vacant Land Remaining in USA

	5-Year Supply	Remaining Supply	
		Acres or Units	Estimated Years Supply
Residential	2,000 units	3,549 units	9
Commercial C-3	44 acres	199.2 acres	23
Commercial CM	15 acres	11.7 acres	4

Note: Residential land is designated RND, RMD, RLD, RH, and HPA

Source: City of Gilroy

Residential Land Designations

Of the vacant residential land, the largest supply is that designated in the *Draft 1999-2020 Gilroy General Plan* as RESIDENTIAL – NEIGHBORHOOD DISTRICT. Most of the area covered by this designation is undeveloped land currently designated LOW DENSITY RESIDENTIAL or RURAL RESIDENTIAL. The LOW DENSITY RESIDENTIAL designation has an average density of five units per acre, compared to nine units per acre in the RESIDENTIAL – NEIGHBORHOOD DISTRICT. The RURAL RESIDENTIAL designation has a maximum density of 0.2 units per acre. These proposed reclassifications increase the number of dwelling units that could potentially be built within the USA, because the allowable net development density per acre is higher under the proposed RESIDENTIAL – NEIGHBORHOOD DISTRICT designation than the existing R-1 designation.

The RESIDENTIAL – NEIGHBORHOOD DISTRICT land use designation is a mixed-use designation that also permits some neighborhood-serving commercial and office uses. No commercial development is required, but some developments may have fewer residential units if commercial uses are incorporated into RESIDENTIAL – NEIGHBORHOOD DISTRICT developments.

The supply of lowest density residential land within the USA is much less. In the 1995 vacant land survey, the City had a supply of 595 acres of vacant RESIDENTIAL HILL DISTRICT available. Much of the land under this designation has been developed or received RDO allocations.

Commercial Designations

The City's supply of COMMERCIAL – GENERAL SERVICES land that is zoned CM is the most limited of any covered by this survey, with an approximate four-year supply remaining. Some CM uses could be accommodated by the proposed CAMPUS INDUSTRIAL general plan designation in northeast Gilroy.

If the sports park were to be located within the existing USA, rather than the approved site within the USA amendment area, the supply of vacant residential land within the existing USA could be reduced. Location of the sports park within the USA on the Bolsa Road site would have no effect on residential vacant land. Location of the sports park on the State Highway 152/Santa Teresa Boulevard site would result in a small reduction in residential vacant land. If the sports park were located on the Santa Teresa Boulevard /Miller Road site, approximately 655 residential units would be displaced. This would amount to a reduction of approximately one and one-half years worth of vacant residential land.

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Appendix C

Updated Hydrology Report

GILROY SPORTS PARK
USA AMENDMENT

DRAFT
HYDROLOGY STUDY

PREPARED FOR
EMC Planning Group

PREPARED BY
SCHAAF & WHEELER
CONSULTING CIVIL ENGINEERS

January 10, 2002

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DRAFT HYDROLOGY STUDY
GILROY SPORTS PARK USA AMENDMENT

Executive Summary

The project site is located on the east bank of Uvas Creek in an area, which is an historic flood plain due to overflows from Uvas Creek. The site flooded in 1955, and 1986. The U. S. Army Corps of Engineers has completed a levee project for the reach of Uvas Creek upstream from the project site. The levee was designed to provide 100-year flood protection for the development areas upstream of Thomas Road. The levee ends near the northern edge of the sports park site.

As local sponsor for the flood control project, the Santa Clara Valley Water District (SCVWD) has jurisdiction over Uvas Creek and owns the flood control levee. Additionally, SCVWD holds a flood flowage easement that restricts land used and development on a majority of the sports park site. The flowage easement encompasses land that was calculated to suffer induced flooding due to the construction of the Uvas Creek levee. Areas of induced flooding would be flooded to a greater extent than would have been expected prior to the construction of the levee. Potential land uses within the flowage easement are restricted to open space uses that would not inhibit the flow of flood waters across the land.

The sports park design was developed to incorporate consideration of the potential flooding issues, to maintain the existing flow patterns on the site, avoid increased flow or flood depths on adjacent properties, and to provide storm drainage for the proposed park project. These objectives were reviewed with SCVWD to ensure that the project constraints would be consistent with the intent of the SCVWD flood flowage easement.

The proposed Gilroy Sports Park USA area development would be consistent with the objectives of the SCVWD flood flowage easement. The sports park grading is generally lower than the existing ground elevations in the paved parking and access road areas to allow for blockage in other areas for park facilities. The proposed commercial development would balance cut and fill on the site to maintain flood conveyance. The estimated flood elevations for the Uvas design overflows and 100-year flood overflows are at or below existing elevations. The Uvas Creek overflows would enter the site and leave the site in the same quantities and locations as the existing flood condition. The flood risk on other properties would not be affected by the proposed project.

The estimated 10-year and 100-year peak runoff from the project site would increase due to the proposed development. The estimated increase would depend on the particular rainfall event. The increased peak flow would occur prior to the peak flow in Uvas Creek and would not affect flooding from the creek. The local contribution to the peak flow in the creek would not increase due to development. Therefore, the project would not affect peak flows in the creek or flooding from Uvas Creek.

DRAFT
HYDROLOGY STUDY

GILROY SPORTS PARK USA AMENDMENT

Introduction

This report describes the hydrology analyses for the Gilroy Sports Park Urban Service Area (USA) Amendment project in the City of Gilroy, Santa Clara County. The proposed sports park would be located within the 100-year base flood plain from Uvas Creek. The hydrology study was completed as part of the supplemental EIR studies for the proposed USA amendment. The purpose of this study was to:

1. document the existing flood hydrology and hydraulics;

2. estimate the potential flood elevations and flow areas for the project; and

3. estimate the potential effects of the proposed development on drainage and flood flows.

This report supplements the previous hydrology study for the Sports Park which was completed in May 1999.

Project Description

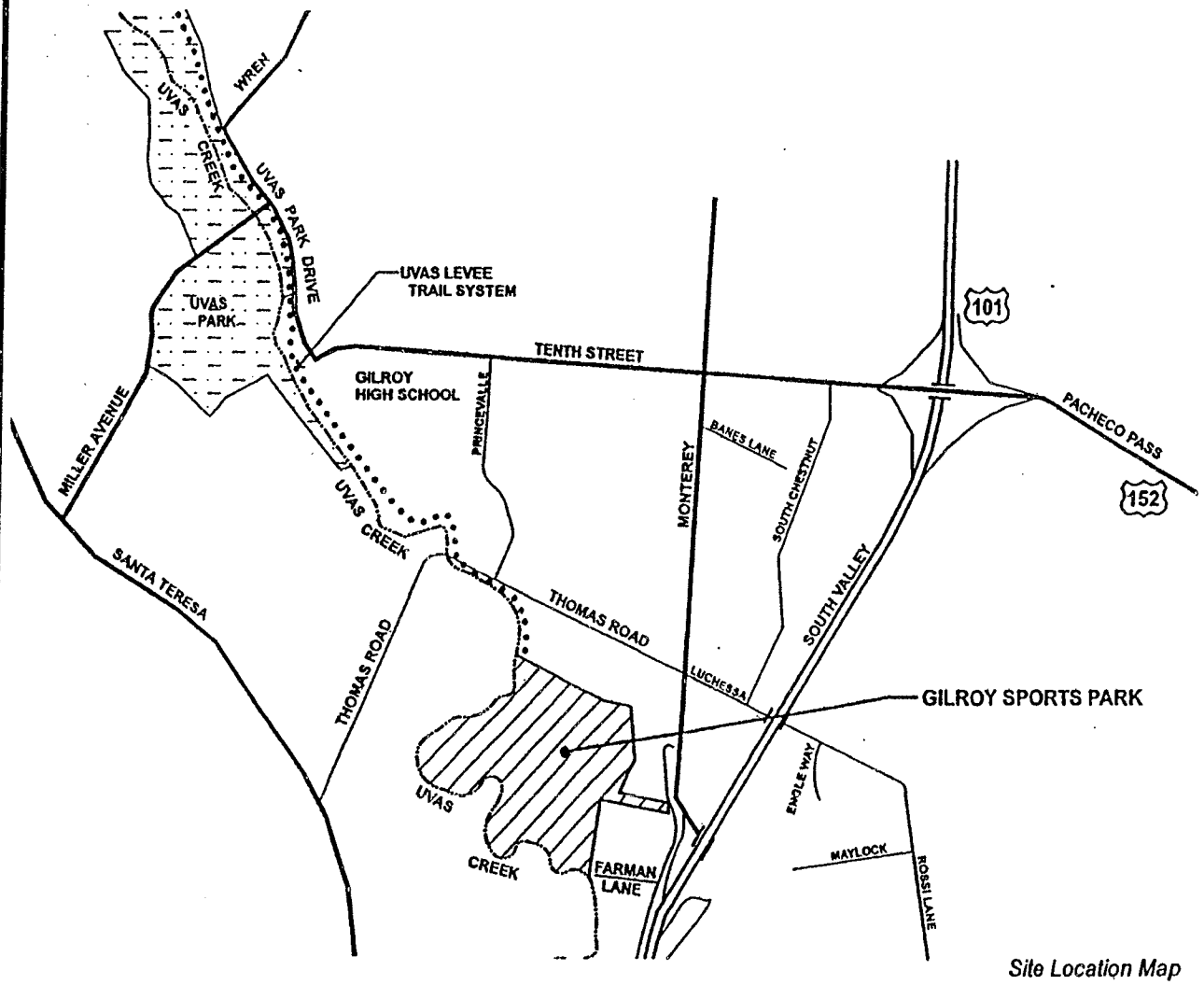
The project site is located at the south end of Gilroy, southwest of the intersection of Thomas Road and Monterey Road. The site is located on the east bank of Uvas Creek and extends from Thomas Road to Farman Lane, approximately 2500 feet south of Thomas Road. The site is cxtends from the east bank of Uvas Creek to Monterey Road. The project site is approximately 140.2 acres.

The proposed USA amendment includes the sports park (78.36 acres), residential development (27.72 acres), and commercial development (27.12 acres). The sports park is an approved project. The residential development north of the park and the commercial development east of the park are proposed projects.

Uvas Creek

The project site is located in the Uvas Creek watershed southwest of the City of Gilroy. Uvas Creek is a tributary to the Pajaro River system which drains west through the Coast Range to Monterey Bay. The Pajaro River and its tributaries drain approximately 1300 square miles. The principal tributaries of the Pajaro River are San Benito River, San Juan Creek, Uvas-Carnadero Creek, Llagas Creek, Tequisquita Slough, and Salsipuedes Creek.

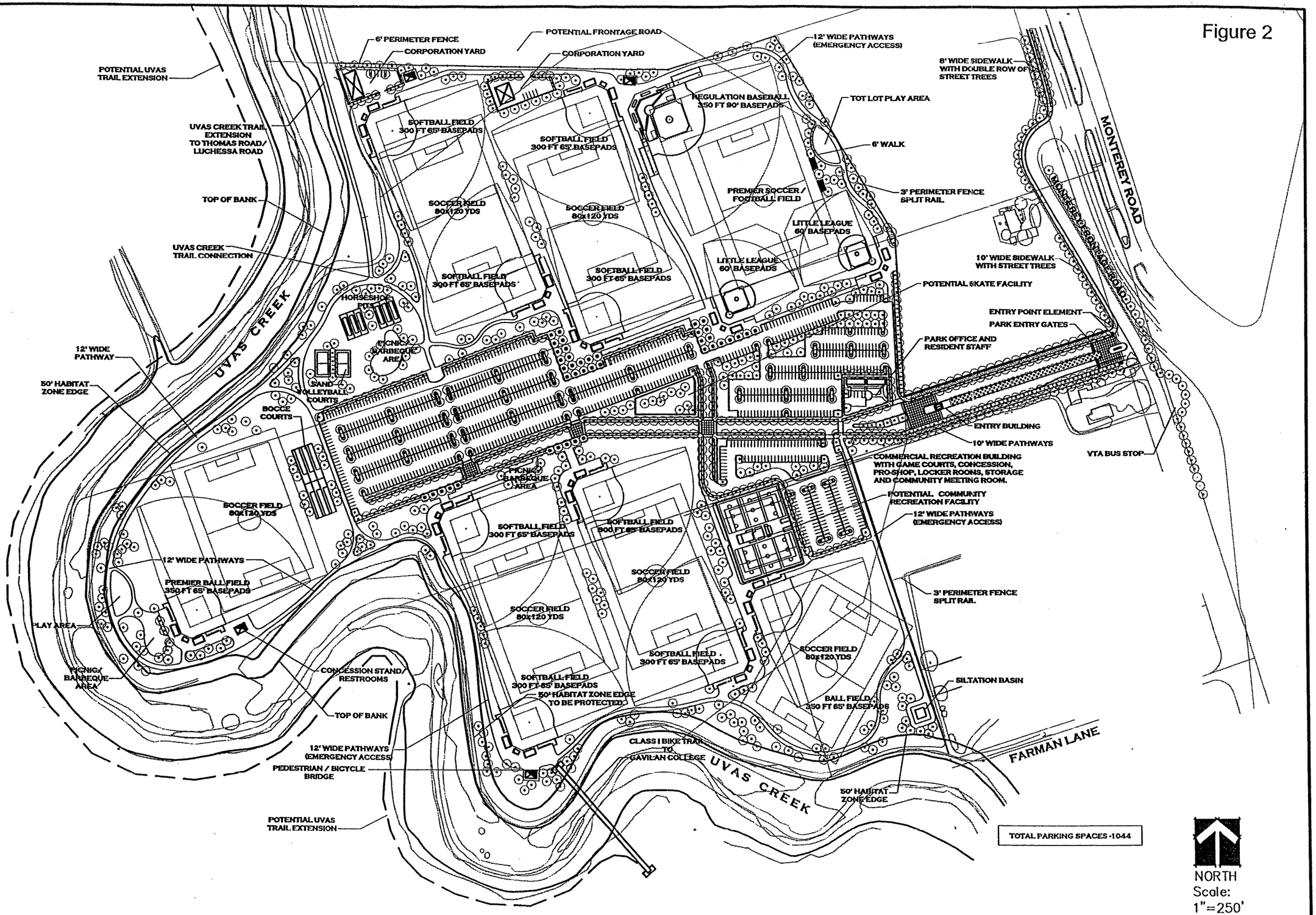
Figure 1



Site Location Map

Schaaf & Wheeler

Figure 2



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GILROY SPORTS PARK - FINAL MASTER PLAN

Schaaf & Wheeler

Uvas-Carnadero Creek is located in southern Santa Clara County and drains an area of approximately 89 square miles with its headwaters in the Santa Cruz Mountains. The basin is primarily mountainous being bounded on the north, west, and south by the Santa Cruz Mountains and to the east by the Llagas Creek drainage basin. The creek generally flows southeast to join the Pajaro River approximately six miles south of the City of Gilroy. Uvas-Carnadero Creek is approximately 32 miles in length with elevations ranging from 120 feet to 3800 feet above mean sea level. Upstream of U.S. Highway 101 the stream is known as Uvas Creek, and downstream as Carnadero Creek.

Stream flows in Uvas-Carnadero Creek are regulated by Uvas Reservoir, constructed in 1958 by the South Santa Clara Valley Water Conservation District for water supply purposes. The reservoir has a storage capacity of 10,350 acre-feet. The drainage area at the reservoir is approximately 30 square miles. The reservoir is operated for water supply purposes, but does provide some incidental flood control benefits due to peak flow attenuation within the reservoir.

The upland areas of Uvas Creek including the project site have soils mainly of the Los Gatos, Gaviota, and Vallecitos associations. They range in depth from shallow to deep, and are located on steep to very steep slopes. The vegetative cover includes oak, pine, brush, hardwoods, and grasses. The infiltration rates of water in the upland areas is generally slow. The upland soils have been classified to have a high to very high erosion potential, although sedimentation rates in the reservoir have not been unusually high in the past. This is probably due to the relatively undisturbed character of the upland areas of the watershed.

The upland portions of the watershed has very little development at this time, and the County General Plan calls for only limited development in the future with mostly open space.

The lowland valley areas of Uvas Creek including the project site have soils mainly of the Arbuckle, Pleasanton, and Yolo associations. They range in depth from deep to very deep, and are located on shallow to moderate slopes. The infiltration rates of water in the lowland areas is generally moderate to good. The lowland soils have been classified to have slight erosion potential.

The area has a relatively mild climate, with ninety percent of the annual rainfall occurring in the late fall and winter months. January is usually the month with the most rainfall. The mean annual precipitation within the Uvas Creek watershed varies from a high of 40 inches in the Santa Cruz Mountains to a low of 20 inches near Gilroy.

Flood History

Damaging floods have occurred on Uvas Creek in 1937, 1940, 1955, 1958, 1963, and 1986. The flood of record before 1986 occurred in December 1955 with a flow of 14000 cfs at U. S. Highway 101. According to the local newspapers in Gilroy, the December 1955 flood event was reported to be the greatest event since 1880. Flooding was mainly limited to the area east of Thomas Road. The flood in February 1986 was larger than the 1955 event. The estimated peak flow was approximately 14500 cfs upstream of Thomas Road even with the attenuation effects of

Uvas Reservoir. The reservoir was completed in 1958 after the 1955 flood. In 1986, Uvas Creek overflowed upstream of Thomas Road flooding the existing development area upstream of Thomas Road between the creek and Monterey Road. The creek also overflowed in the agricultural area downstream of Thomas Road. The flood flows generally continued south along Monterey Road to return to the creek channel near Highway 101. The flood flows also overflowed to the east across Monterey Road and Highway 101 near Luchessa Avenue and flooded the commercial area east of Monterey Road.

Corps of Engineers Project

The U. S. Army Corps of Engineers has completed a levee project for the reach of Uvas Creek from 1100 feet downstream of Thomas Road to 4500 feet upstream of Miller Avenue. The project was designed to provide 100-year flood protection in the development area on the east side of the channel. Construction started in 1988 and was completed in 1990.

As local sponsor for the flood control project, the Santa Clara Valley Water District (SCVWD) has jurisdiction over Uvas Creek and owns the flood control levee. Additionally, SCVWD holds a flood flowage easement that restricts land used and development on a majority of the sports park site. The flowage easement encompasses land that was calculated to suffer induced flooding due to the construction of the Uvas Creek levee. Areas of induced flooding would be flooded to a greater extent than would have been expected prior to the construction of the levee. Potential land uses within the flowage easement are restricted to open space uses that would not inhibit the flow of flood waters across the land.

Flood Insurance Study

Uvas Creek was studied as part of the Federal Emergency Management Agency (FEMA) Flood Insurance Study for Santa Clara County, completed in 1979. The channel has an estimated capacity of approximately 14000 cubic feet per second upstream of Thomas Road, decreasing to approximately 8300 cfs at U. S. Highway 101. Flows in excess of the channel capacity spill from the channel toward the east.

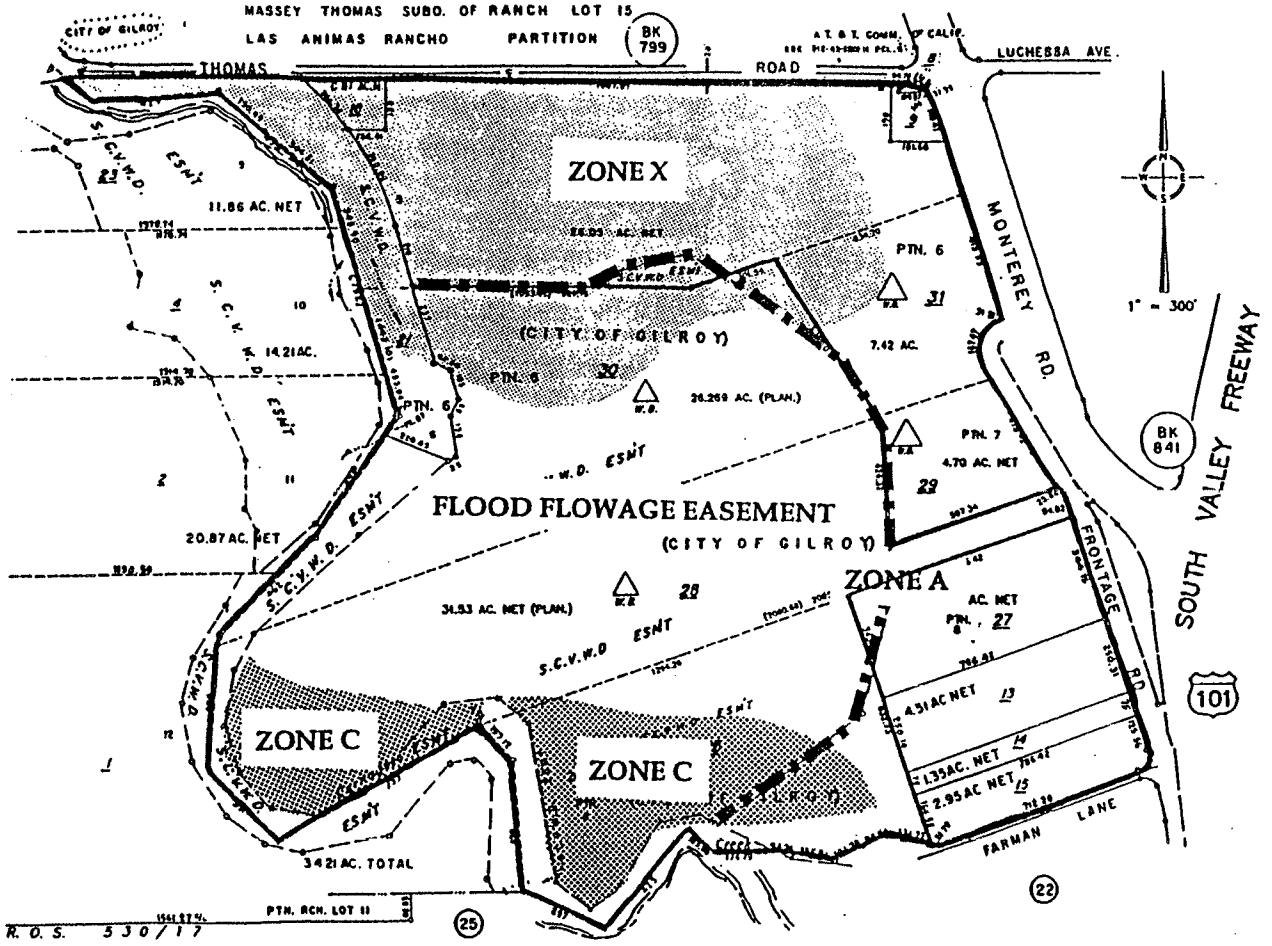
The Flood Insurance Rate Maps (FIRMs) for the City of Gilroy and Santa Clara County were amended in 1991 by a Letter of Map Revision (LOMR). The maps were revised to include the flood control levee upstream of the sports park site.

The FIRMs were revised most recently by FEMA to consider current levee policies and topography in the area. The analysis also included more detailed analyses of the Uvas Creek overflows. The current FIRMs became effective in 1998.

Hydrology

Based on the FEMA detailed Uvas Creek hydraulic model for the current FIRMs, the estimated 100-year flow rate for Uvas Creek downstream of Thomas Road is 14000 cubic feet per second (cfs). The 100-year flow rate is contained within the Uvas Creek channel downstream to the end

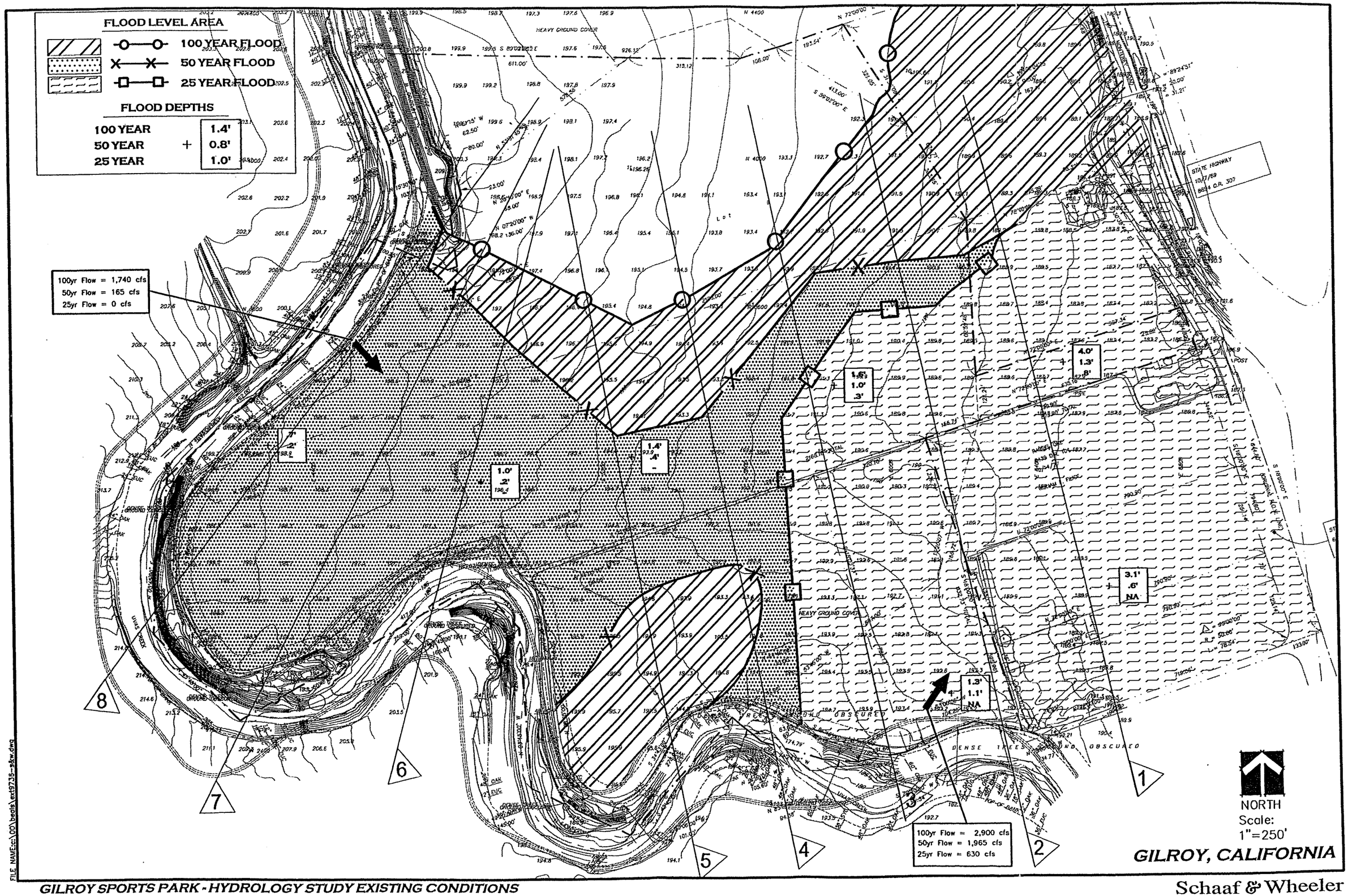
Figure 3



Source: FEMA, City of Gilroy and EMC Planning Group Inc.

No Scale

Schaaf & Wheeler



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GILROY SPORTS PARK - HYDROLOGY STUDY EXISTING CONDITIONS

Schaaf & Wheeler

of the flood control levee near the northwest corner of the sports park site. Downstream of the levee, approximately 1740 cfs overflows to the east into the sports park site. Further downstream, near the southeast corner of the sports park site, an additional 2900 cfs overflows into the sports park for the 100-year flood.

The FEMA hydraulic model was also used to estimate the potential overflows for the 25-year and 50-year flood events, based on the FEMA channel flow rates. The FEMA estimated 50-year flow rate downstream of Thomas Road was 11000 cfs. The estimated 50-year overflow at the end of the flood control levee was 165 cfs. An additional 1900 cfs would overflow from the channel near the southeast corner of the sports park site.

For the 25-year event, there would be no overflow at the downstream end of the flood control levee. However, approximately 630 cfs would overflow at near the southeast corner of the sports park.

For the 10-year event, the FEMA flow rate was 5500 cfs. The channel has capacity for the 10-year flood and would not overflow within the sports park site.

Design Flow

The Corps of Engineers levee project on the east side of Uvas Creek upstream of the Sports Park was designed for a 100-year design flow rate of 17000 cfs. This is greater than the 100-year flow rate estimated for the FEMA flood insurance study. The design flow rate generally considers more conservative watershed conditions.

The FEMA flood insurance study HEC-2 model was used to estimate the overflow from Uvas Creek on the project site. The upstream overflow at the end of the Corps levee was estimated to be 3900 cfs. The downstream overflow at the southeast corner of the sports park site was estimated to be 2700 cfs. The combined overflow was estimated to be 6600 cfs. This is approximately 2000 cfs greater than the 100-year flood condition.

Flood Plains

The existing flood plain and flood elevations for the 100-year, 50-year, and 25-year flood events on the project site were estimated using the Corps of Engineers HEC-2 computer model. The estimated flow rates were based on the FEMA Uvas Creek overflow flow rates. Existing condition cross sections on the project site were taken from topographic maps completed in 1998.

The site flood plains and typical flow depths are shown in Figure 4. The figure includes the 100-year, 50-year and 25-year flood areas. The flood plain areas differ in certain areas from the effective FEMA flood plain maps due to differences in the topographic mapping and the FEMA mapping standards.

In general, there are two separate flow paths associated with the two separate overflow locations. The existing ground slopes from the creek toward Monterey Road. There is a shallow swale through the middle of the site which slopes from west to east, from the end of the flood control levee to approximately the access road area. Overflows from the creek flow as shallow sheetflow away from the creek toward the swale.

The existing 100-year flood plain analyses from the flood insurance study were reviewed to establish an estimated water surface elevation at Monterey Road for the design flood condition. The existing 100-year flood analysis was based on an overflow of 4640 cfs on the sports park site. The water surface elevations on Monterey Road near the site were based on weir flow over Monterey Road north of the Highway 101 embankment. The Monterey Road weir was more restrictive than the flow over the railroad embankment east of Monterey Road. The elevation discharge curve for the weir was used to estimate a water surface west of Monterey Road of 192.4 ft for the combined overflow of 6600 cfs.

Drainage

There are no existing drainage facilities on the sports park site. Runoff from the site flows overland to Monterey Road. There is a City of Gilroy storm drain system in Monterey Road which discharges to a Caltrans storm drain to Uvas Creek at Highway 101. Based on the City of Gilroy Storm Drain Master Plan, the existing 54-inch storm drain in Monterey Road south of Farman Lane has capacity for the proposed project area.

Sports Park Design

The Sports Park design philosophy was developed to guide the sports park plan and grading to incorporate consideration of the potential flooding issues into the park planning. The objectives of the design philosophy were to maintain the existing flow patterns on the site, avoid increased flow or flood depths on adjacent properties, and to provide storm drainage for the proposed park project. These objectives were reviewed with SCVWD to ensure that the project constraints would be consistent with the intent of the SCVWD flood flowage easement.

Based on the existing flood plain information, the proposed residential area north of the Sports Park would be partially within the 100-year flood plain. The lowest portion of the site, near Monterey Road would be flooded due to the Uvas Creek overflows. Because the overflows occur downstream of the residential development, the flooding on the site would be ponded water due to the depth of flow downstream in the commercial development area along Monterey Road. For evaluation purposes, the residential development was assumed to meet the minimum standards required for development in the floodplain, including building pad elevations above the 100-year water surface elevation.

The proposed commercial development areas are located in an area where the overflows from Uvas Creek turn to follow Monterey Road south toward Uvas Creek at Highway 101 or flow over Monterey Road toward the railroad. The creek overflows enter the commercial area from the west and leave on the south or east side.

Figure 5

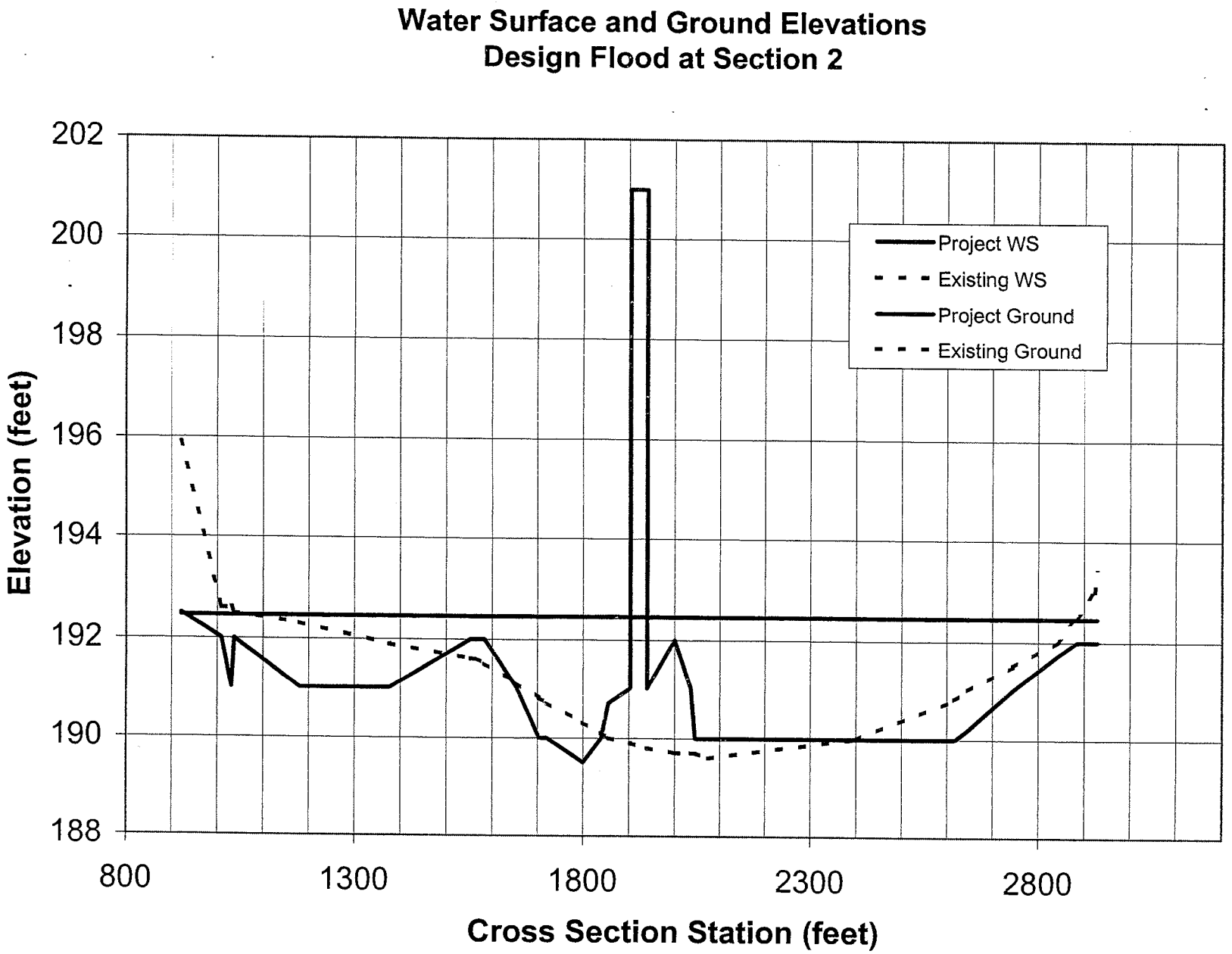

Water Surface and Ground Elevations
Design Flood at Section 2
Elevation (feet)
202
200
198
196
194
192
190
188
800
1300
1800
2300
2800
Cross Section Station (feet)
Project WS
Existing WS
Project Ground
Existing Ground

Figure 6

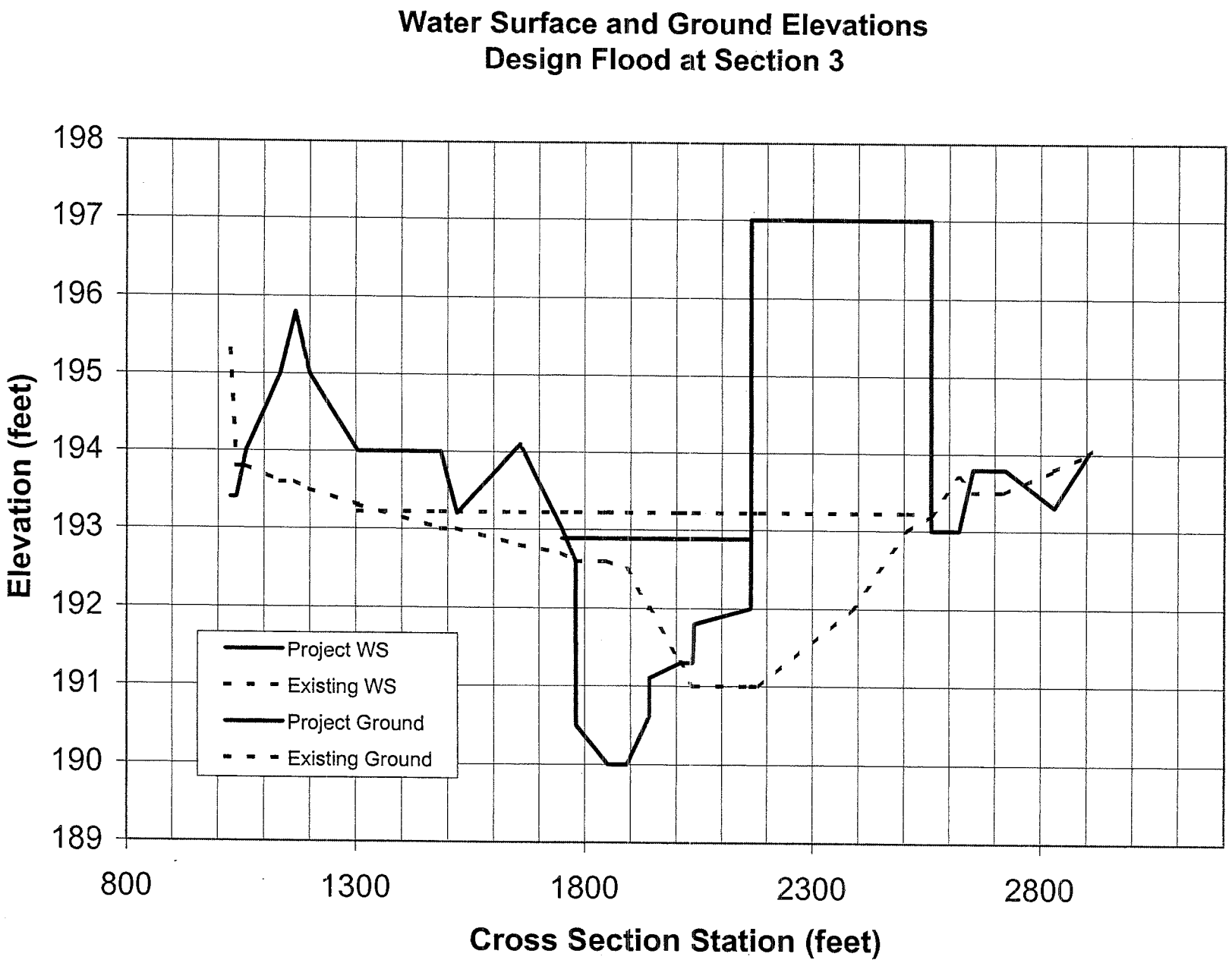

Water Surface and Ground Elevations
Design Flood at Section 3
198
197
196
195
194
193
192
191
190
189
Elevation (feet)
800
1300
1800
2300
2800
Cross Section Station (feet)
Project WS
Existing WS
Project Ground
Existing Ground

Figure 7

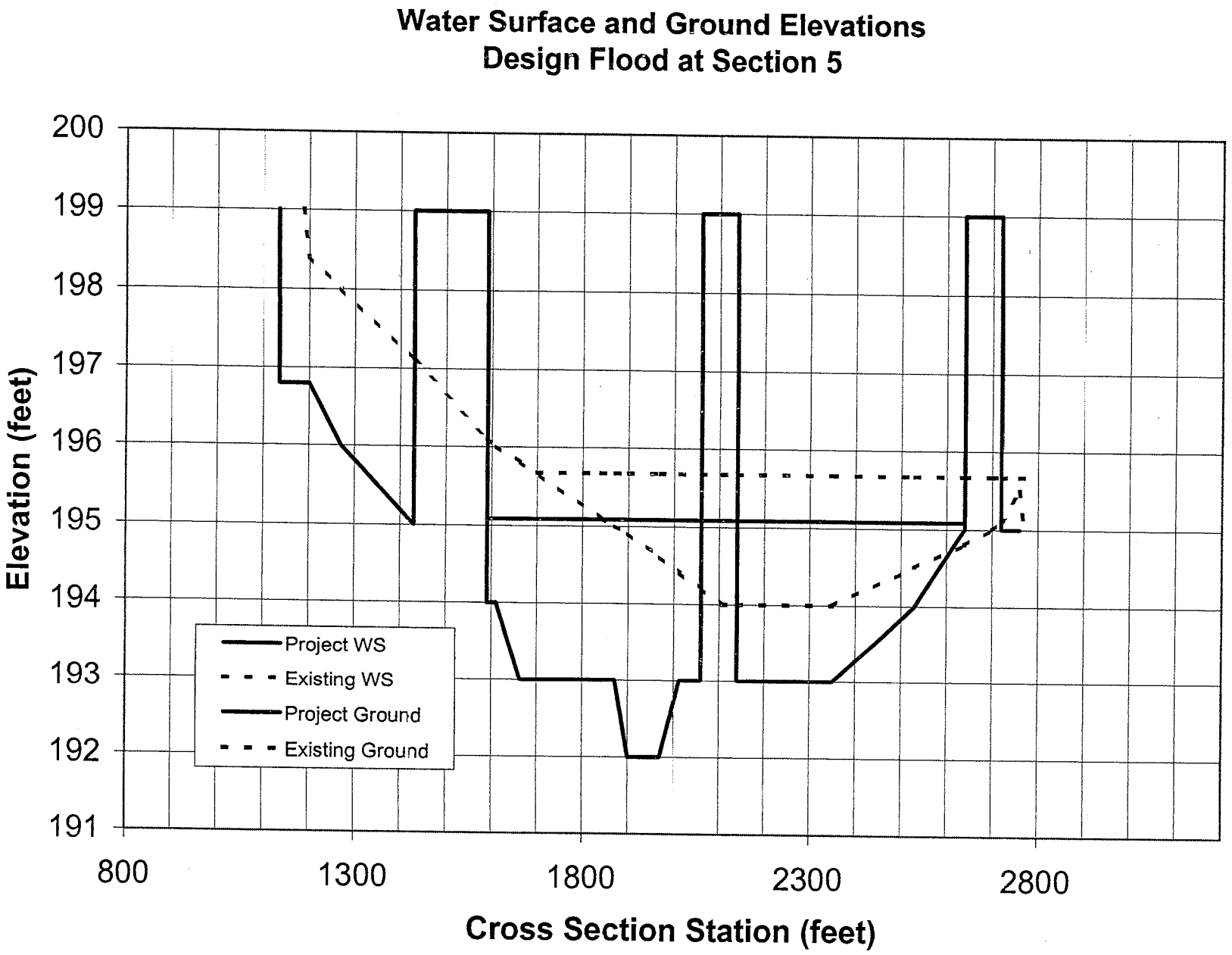
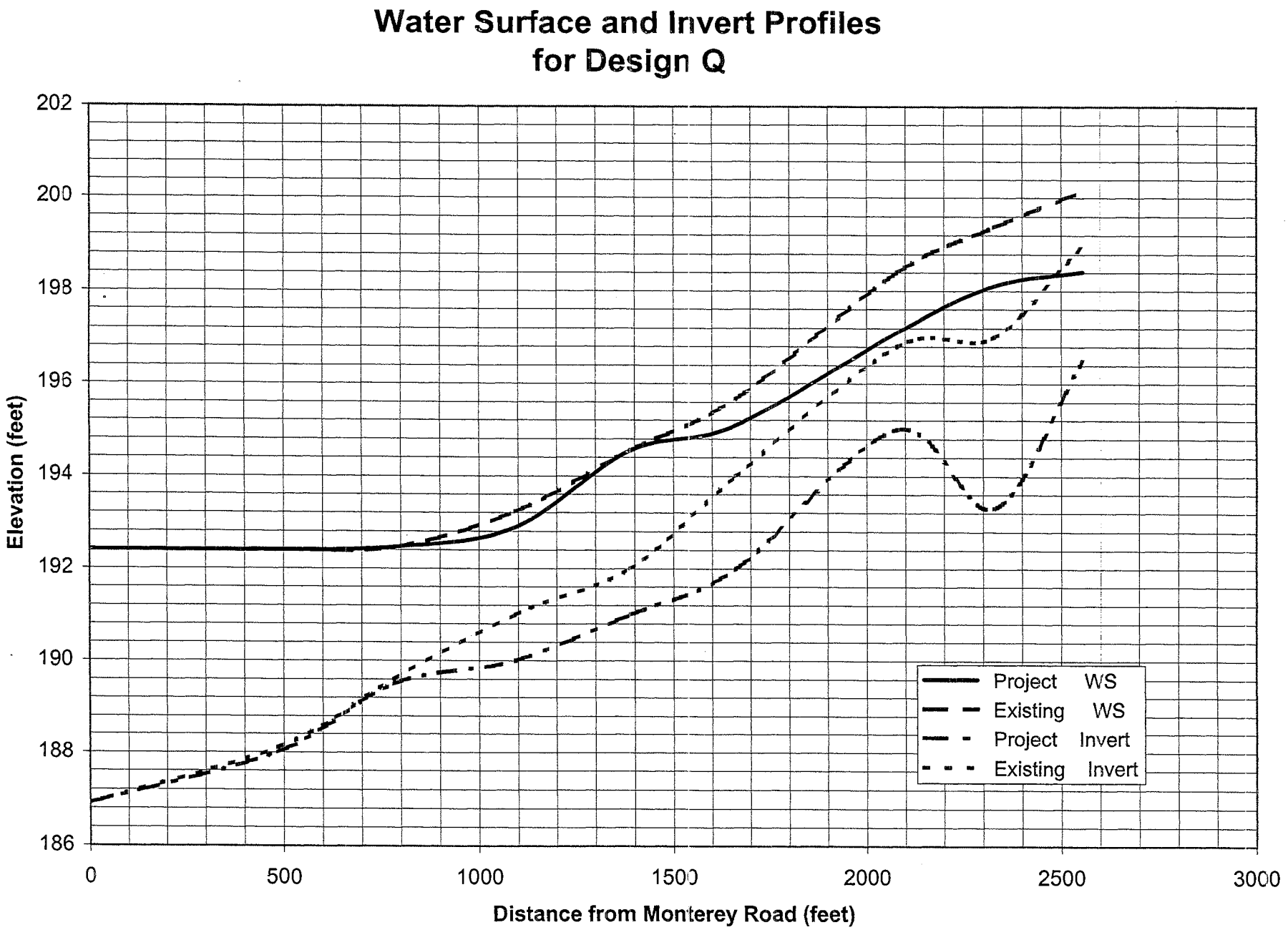

Water Surface and Ground Elevations
Design Flood at Section 5
Elevation (feet)
200
199
198
197
196
195
194
193
192
191
800
1300
1800
2300
2800
Cross Section Station (feet)
Project WS
Existing WS
Project Ground
Existing Ground

Figure 8


Water Surface and Invert Profiles
for Design Q
Elevation (feet)
202
200
198
196
194
192
190
188
186
0
500
1000
1500
2000
2500
3000
Distance from Monterey Road (feet)
Project WS
Existing WS
Project Invert
Existing Invert

FLOOD LEVEL AREA

100 YEAR FLOOD

50 YEAR FLOOD

25 YEAR FLOOD

FLOOD DEPTHS

100 YEAR	+	1.4'
50 YEAR		0.8'
25 YEAR		1.0'

UVAS CREEK

MONTEREY ROAD

MONTEREY FRONTAGE ROAD

FARMAN LANE

OUTSIDE OF 100 YEAR FLOOD

OUTSIDE OF 100 YEAR FLOOD

OUTSIDE OF 100 YEAR FLOOD

0.8 .1' - 3.3' 2.0' 0.55 0.05 0.1' 2.5' 1.9' 1.0 0.5' 0.1' 2.5 1.5' 1.0' 0.5 0.8' 0.3'

1 2 3 4 5 6 7 8

NORTH

Scale: 1"=250'

GILROY, CALIFORNIA

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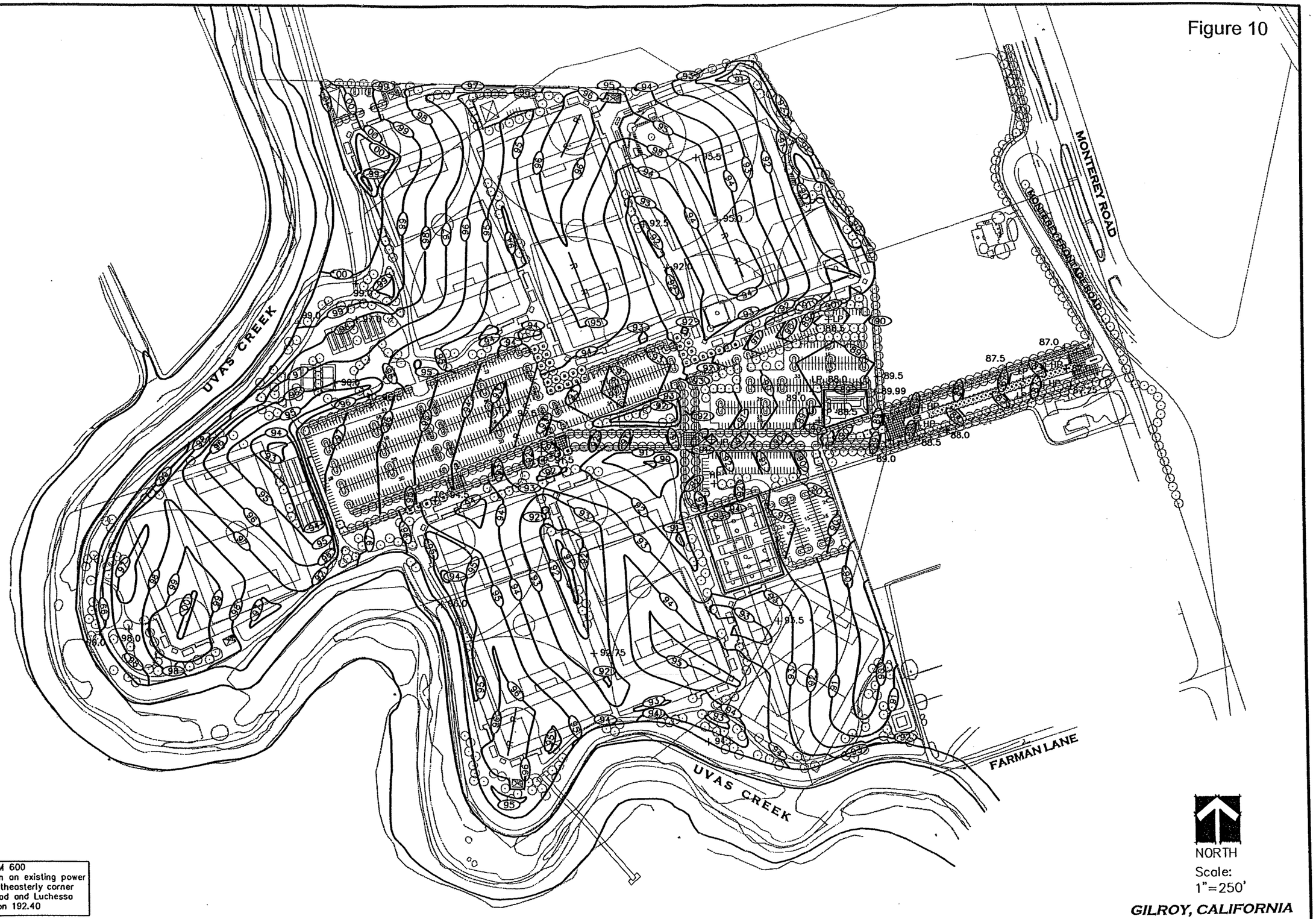
GILROY SPORTS PARK - FINAL HYDROLOGY MODEL

Schaaf & Wheeler

Figure 10



Benchmark: RM 600
Railroad spike in an existing power pole at the northeasterly corner of Monterey Road and Luchessa Avenue. Elevation 192.40

NORTH
Scale:
1"=250'

GILROY, CALIFORNIA

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For evaluation purposes, the commercial development was assumed to include building pad elevations above the 100-year and design water surface elevations. In addition, it was assumed that the development would balance cut and fill on the site to maintain flow areas in the landscaping and parking areas. This would allow sheetflow to cross the site without significant increases in the water surface elevations. No site plans or grading plans have been established for the commercial development.

Project Flood Elevations

The project condition flood elevations and flood plains were estimated using the HEC-2 computer model used to estimate the existing condition flood elevations. The ground cross sections were modified to include the proposed project grading. Cross section areas which may be obstructed by buildings or softball backstops were blocked in the project condition cross sections. Representative cross sections are shown in Figures 5, 6, and 7.

The calculated design water surface elevations for the existing and project conditions are shown on the flood profile in Figure 8, along with the corresponding invert elevations. This condition corresponds to the estimated maximum overflows from Uvas Creek for the 17000 cfs design flow in Uvas Creek upstream of the site. The invert elevations are based on the lowest grade elevation on any cross section. The profile was taken along a line through the property which approximates the alignment of the proposed access road.

It should be noted that the design water surface elevation for the project condition is below the existing ground elevations at the lowest portion of the cross sections close to Uvas Creek. The lowest portions of the parking areas and access road near the creek are approximately 4 feet below existing grade elevations to provide slope across the turf areas near the creek, and to allow ponding areas within the parking areas. For flood events in which the creek overflows, the ponding areas in the parking lots will act as sedimentation basins to allow silt to deposit on the parking areas. Paved parking areas would be easier to clean in comparison to turf areas. These ponding areas are shown as low points on the invert profile for the project condition.

As shown on the flood profile in Figure 8, the flood elevations for the design flood condition are at or below the existing water surface elevation for all areas. No areas outside the project boundary would be affected by the increased water surface elevations due to the project.

The project condition flood plains are shown in Figure 9.

Project Drainage

The proposed storm drain system for the sports park site is shown in Figure 11. The storm drain system would drain the 10-year runoff from the sports park site. The storm drain system would include two separate pipe systems. The main system would drain the majority of the sports park site and would discharge to an outfall to Uvas Creek at the southeast corner of the site. The

Figure 11

PHASE IV

PHASE VII

PHASE VI

PHASE II

PHASE I

PHASE V

PHASE III

UVAS CREEK

MONTEREY ROAD

MONTEREY (HIGHWAY 101)

FARMAN LANE

STORM C.O.

STORM MH

NON-POINT SOURCE SEPARATOR / COLLECTOR
MANUALLY CLOSED GATE
SILTATION CLEANUP BASIN (V CHANNEL)
FLASHBOARD AT OUTLET (WEIR)
FLAP GATE
CREEK OUTFALL

NORTH

Scale:
1"=250'

GILROY, CALIFORNIA

Benchmark: RM 600
Railroad spike in an existing power pole at the northeasterly corner of Monterey Road and Luchessa Avenue. Elevation 192.40

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GILROY SPORTS PARK - FINAL STORM DRAINAGE MASTER PLAN

Schaaf & Wheeler

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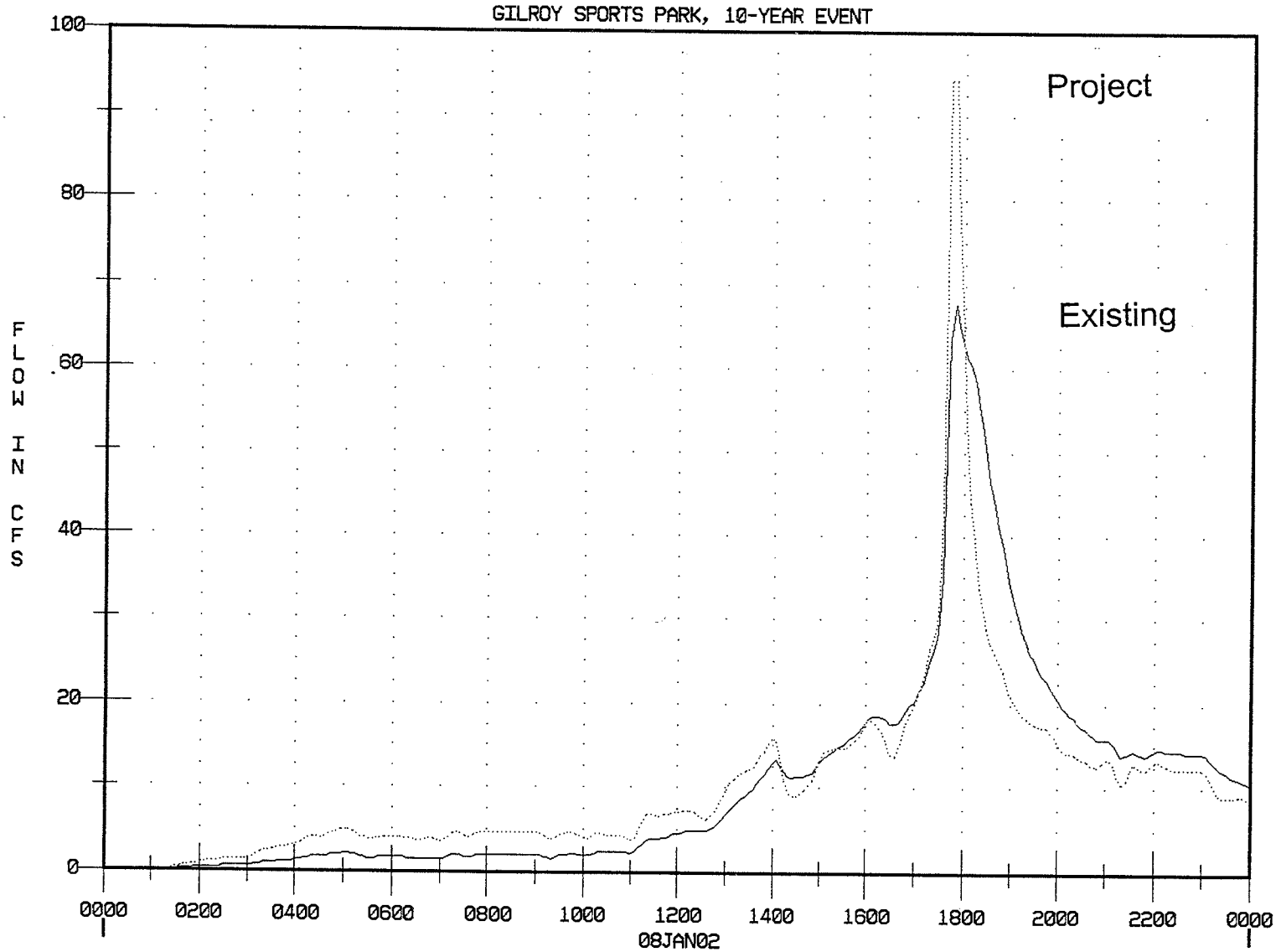
Figure 12



EXI_9B SPORTS_COMPLEX FLOW
PRJ_9B SPORT_COMPLEX FLOW

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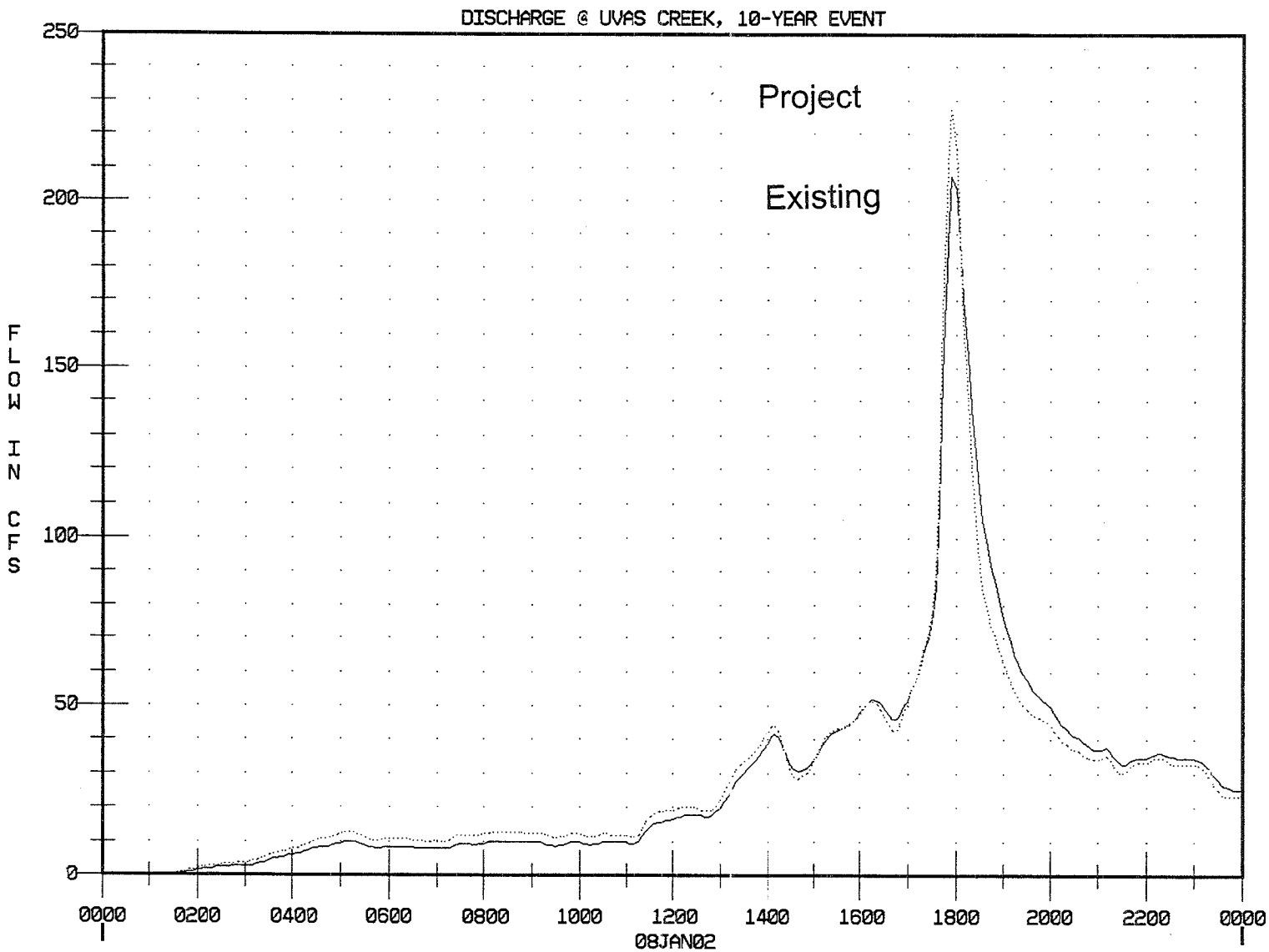
Figure 13



E10 @_UVAS_CREEK FLOW
P10 @_UVAS_CREEK FLOW

10JAN02 14:58:35

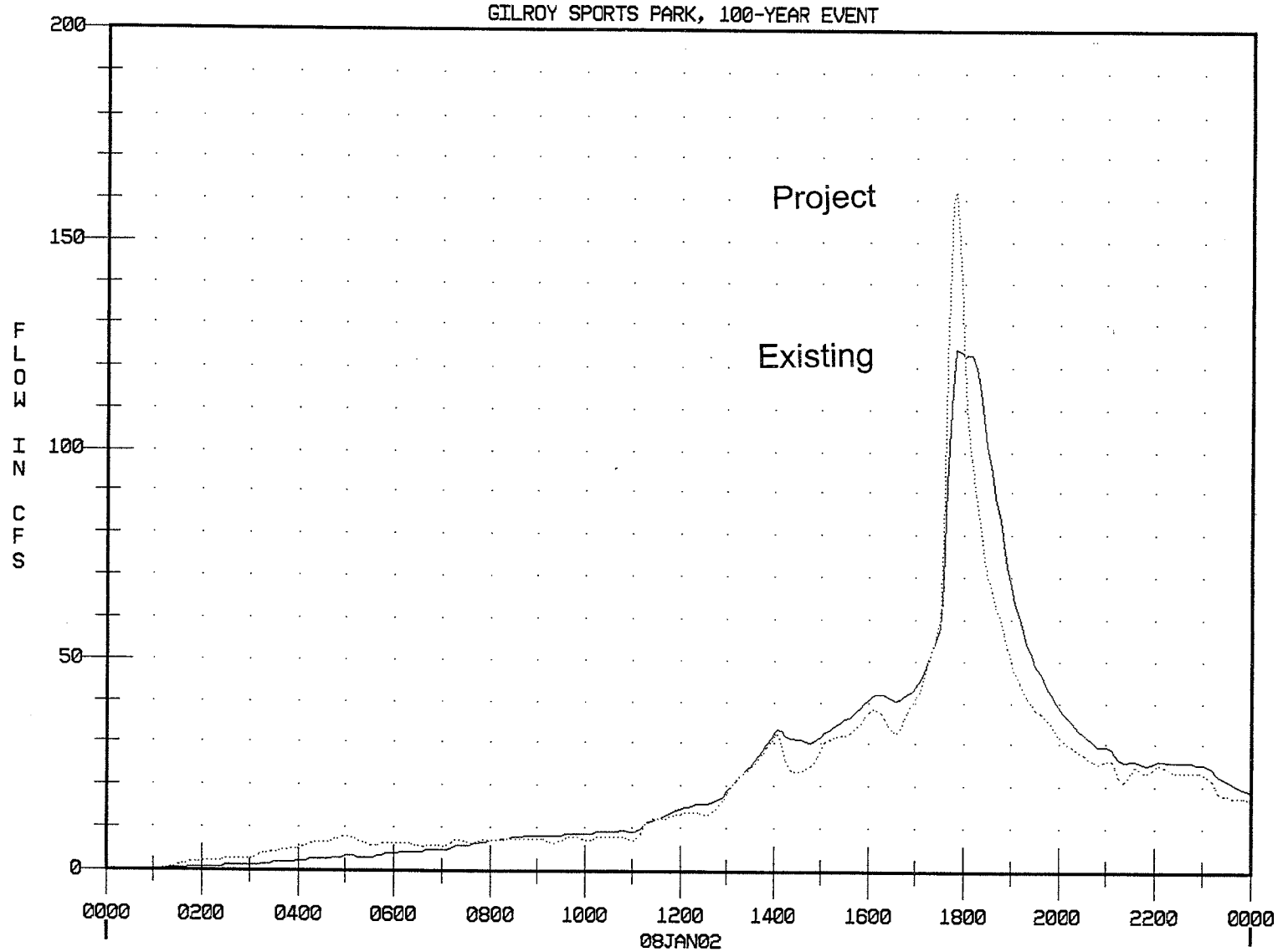


Figure 14

EXI_9B SPORT_COMPLEX FLOW
PRJ_9B SPORTS_COMPLEX FLOW

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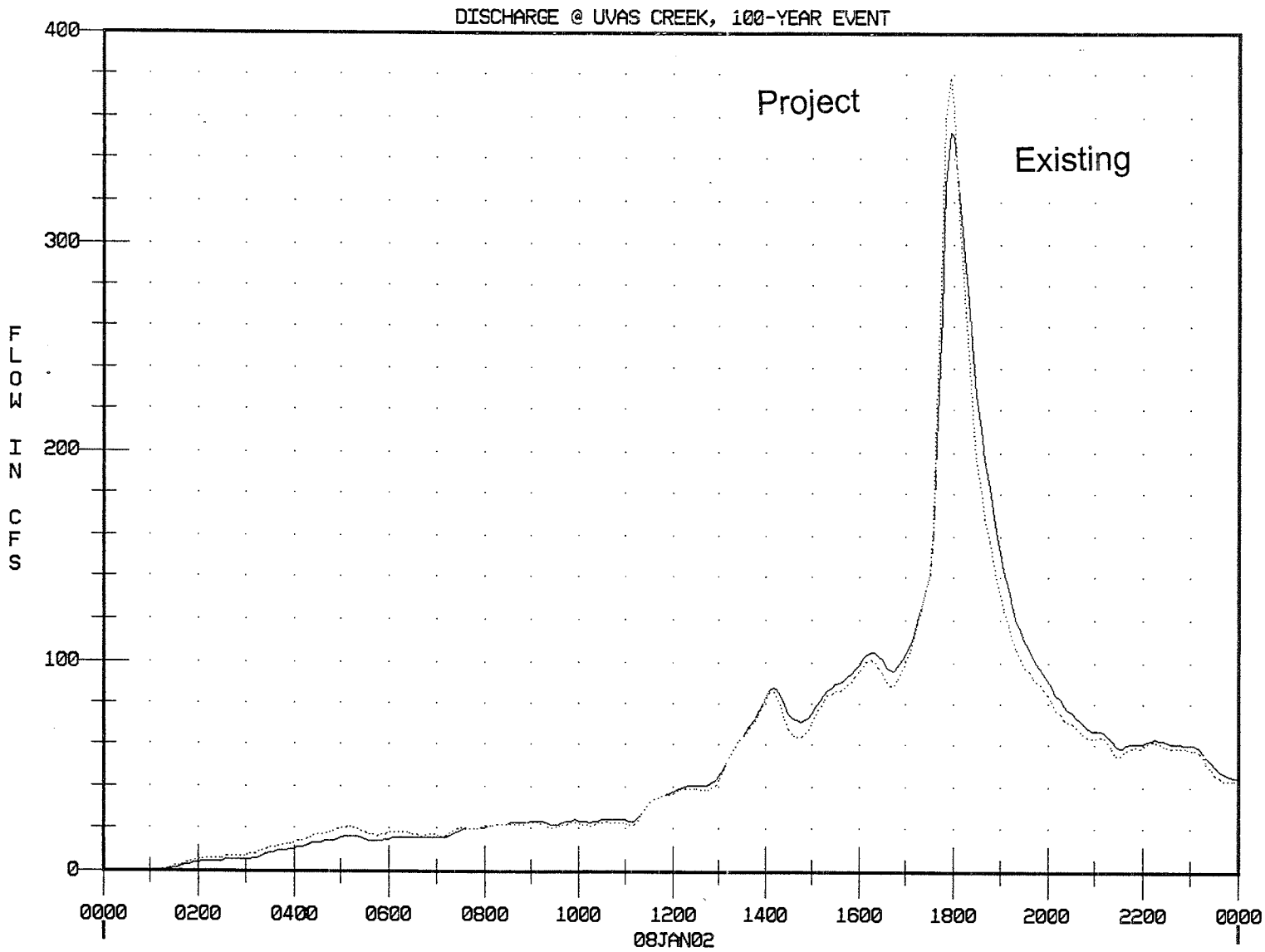

Figure 15

E100 @_UVAS_CREEK FLOW
P100 @_UVAS_CREEK FLOW

second system would drain only the access road from Monterey Road and a portion of the parking areas generally near the park entrance. The access road storm drain would drain to the storm drain in Monterey Road.

The City storm drain system in Monterey Road has capacity to serve the proposed project, and site drains to Monterey Road for existing conditions. However, a new outfall to Uvas Creek was recommended in consultation with the City staff to limit storm drain flows from the site during flood events. This intended to reduce potential sediment inflows to the City storm drain system during flood events. The proposed outfall to Uvas Creek would include a flapgate at the storm drain outfall to prevent back flow from the creek when the water levels in the creek are high. Therefore, when the creek overflows occur, there would be no significant flow though the storm drains and flood water would pond in the low areas in the parking lots and other landscaping areas. This would promote deposition of suspended silt and sediment on the project site, instead of adding to the sediment entering the City storm drain.

The sports park storm drain system includes a sediment/water quality pond near the outfall to Uvas Creek. The pond would trap dust and suspended sediment washed off the parking lot during normal rainfall events. The pond would include a concrete bottom and access road to allow mechanical removal of trapped sediment. The pond would also allow more efficient clean up after a flood event. Trapped silt in the storm drains or on parking lots which cannot be removed mechanically can be washed off into the sedimentation pond, without discharging additional sediment into Uvas Creek.

Runoff

The runoff from the USA amendment project site was estimated for the 10- and 100-year flood events for both the existing and project conditions, to evaluate the potential impact on flood flows in Uvas Creek.

The runoff from the project site and the entire Monterey Road storm drain system drainage area were estimated using the SCVWD draft hydrology methodology. The hydrology is a unit hydrograph procedure based on the Soil Conservation Service (SCS) curve number procedure. The procedure estimates the runoff hydrograph based on the 24-hour rainfall, drainage area, time of concentration, and loss rates based on land use. For the project area, the loss rates were based on the estimated percent impervious for each land use. Pervious areas were assumed to be row crops for existing condition, and turf or for project conditions.

For evaluation purposes, runoff from the portion of the sports park which drains directly to Uvas Creek was included in the project runoff estimates. No distinction was made between the runoff which enters at the site, and the runoff in the Monterey Road storm drain. The storm drain to the creek channel would not operate during large flood events when flood elevations are high in the creek. Therefore, for flood events it was assumed to contribute to the Monterey Road system.

The estimated runoff hydrographs for the existing and project conditions are shown for the sports park project area for the 10-year and 100-year events in Figures 12 and 13.

Table 1
Peak Flow Rates
Sports Park USA Area
140.2 acres

Event	Existing Condition Flow (cfs)	Project Condition Flow (cfs)	Percent Increase
10 Year	68	94	38
100 Year	125	162	30

The estimated runoff hydrographs for the existing and project conditions are shown for the Monterey Road drainage area for the 10-year and 100-year events in Figures 14 and 15.

Table 2
Peak Flow Rates
Monterey Road Drainage System
333.2 acres

Event	Existing Condition Flow (cfs)	Project Condition Flow (cfs)	Percent Increase
10 Year	207	228	10
100 Year	353	378	7

As shown in the flood hydrographs and the peak flow rate tables, the peak flows from the project site would increase with development. This is due to increased runoff from impervious areas, and the increased flow velocities in the site drainage systems. The site runoff would no longer flow overland to Monterey Road to the storm drain system.

The estimated increase in peak flow from the site and the Monterey Road would not have a significant impact on flood conditions in Uvas Creek. The peak flow from the local Monterey Road drainage system represents a relatively small portion of the overall Uvas Creek watershed, and has a different timing that the overall watershed. The time of concentration for the Monterey Road drainage area is approximately 40 minutes. In comparison, the time to peak for the overall watershed, including the area above the Uvas Reservoir is approximately 10 hours. The time to the peak flow in the lower watershed below the reservoir is approximately 4 hours. Therefore,

the peak flow in the Uvas Creek channel would occur at least 3 hours after the peak runoff from the local drainage area. As shown in the hydrographs in Figures 14 and 15, the runoff from the local drainage area after the local peak flow is lower for the project conditions than for the existing conditions. Therefore, the project would not increase flows during the peak flow in the creek.

Conclusions

The proposed Final Draft Master Plan for the Gilroy Sports Park would be consistent with the objectives of the SCVWD flood flowage easement on the project site. The project grading is generally lower than the existing ground elevations in the paved parking and access road areas to allow for blockage in other areas for park facilities. The flood elevations on the project site are at or below existing elevations on the site and at the project boundaries. The Uvas Creek overflows would enter the site and leave the site in the same quantities and locations as the existing flood condition. The flood risk on other properties would not be affected by the proposed project.

The proposed project includes ponding areas in the paved parking areas to allow silt in the flood water to settle out before reaching Monterey Road. The ponding in paved portions of the project would simplify clean up after a flood event. The ponding in the parking areas would not occur for smaller local rainfall events less than a 10-year storm.

The increased impervious area on the project site would increase runoff from the site and local peak flows into Uvas Creek. Due to the difference in timing between the local drainage and the creek flows, the peak local drainage discharge would reach Uvas Creek before the peak flow in the creek. Based on the estimated flow hydrographs, the local runoff at the time of the peak flow in the creek would not increase due to the project.

References

1. The Beals Group, **Gilroy Sports Park Final Draft Master Plan**, April 1999.

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4. Federal Emergency Management Agency, **Flood Insurance Study, City of Gilroy, California**, February 1980.

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7. U. S. Army Corps of Engineers, **Pajaro River, California, Uvas Creek Levee at Gilroy, General Design Memorandum**, November 1984.

8. U. S. Army Corps of Engineers, **Pajaro River Basin, Uvas-Carnadero Creek, General Design Memorandum, Phase I, Main Report and Environmental Statement**, July 1981.

9. U. S. Department of Agriculture, Soil Conservation Service, **Soils of Santa Clara County**, August 1968.

Appendix D

Updated Fiscal Analysis

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FISCAL IMPACT ANALYSIS
GILROY SPORTSPARK
AND URBAN SERVICES AREA
AMENDMENT

March 21, 2000

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EMC PLANNING GROUP INC.

Prepared for the
City of Gilroy

Prepared by

Douglas H. Svensson, AICP
Applied Development Economics
2029 University Avenue Berkeley CA 94704 510.548.5912
1029 J Street, Suite 310, Sacramento CA 95814

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INTRODUCTION

From a fiscal standpoint, the project involves three actions that would affect public costs and revenues for the County of Santa Clara, the City of Gilroy, and other taxing agencies serving the project site. The first is the annexation of the parcels into the City of Gilroy. This would change the jurisdiction of the property and affect the distribution of property tax revenues to many of the taxing agencies. Secondly, operation of the sports park complex will create additional jobs and possibly minor increases in population, which will create service costs for County government, as well as increase the operating budget of the City Parks and Recreation Department. Finally, development of the other land in the annexation into residential and commercial uses will also have a fiscal impact on both the City and the County.

PROPERTY TAX DISTRIBUTION

When the City purchased the property for the sports park, it effectively removed it from the tax rolls. However, the parcels surrounding the sports park site still in private ownership will change jurisdiction with the annexation. Those parcels currently have an assessed value of approximately $1 million and generate total property taxes of about $10,900 per year.

With the annexation, it is likely that the distribution of property taxes will change. The table below shows the current distribution and the anticipated distribution after the annexation is complete. The future distribution is estimated to be similar to that in the Tax Rate Area within the City boundaries immediately adjacent to the project site. The largest difference in the two columns is the transfer of service responsibility and taxes from the South Santa Clara Fire District to the City of Gilroy.

SPORTS PARK FISCAL IMPACT ON THE CITY OF GILROY

The City of Gilroy has not finalized an operating budget for the proposed Sport Park. Preliminary estimates indicate the total cost at full operation may be about $1 million, of which a portion may be funded by user fees.[1] The project planning consultant for the City estimates that the staffing for the park would include six maintenance, ranger and supervisorial positions.[2] However, some of these positions would work only part time at the park. The planned phasing of the park is about 20 years, so the full cost and job base will not reach maximum levels for some time.

[1] Mr. Bill Headley,Gilroy Facilities and Park Development, personal communication.
[2] Mr. Derek McKee, Beals Landscape Architecture, Inc.

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TABLE 3
PROJECT CHARACTERISTICS

RESIDENTIAL	Acres	Units	Population	Unit Values
TOTAL	15.0	147	504	
Low Density (6,000 sq.ft. lots)	5.8	42	144	$400,000
Medium Density(4,000 sq.ft. lots)	4.4	48	165	$325,000
Tri-plexes	4.8	57	196	$225,000
COMMERCIAL	**Acres**	**Sq.Ft.**	**Employment**	**Unit Values**
TOTAL	27.1	590,891	1,085	
Service Commercial	6.8	147,723	271	$75.00
Regional Commercial	20.3	443,169	814	$75.00
Parks	1.2			

TABLE 4
ASSUMED DEVELOPMENT PHASING

ANNUAL	2001	2002	2003	2004	2005	2006
Units - Annual						
Low Density	0	20	22	0	0	0
Medium Denisity	15	20	13	0	0	0
Tri-plexes	0	0	12	45	0	0
Sq.Ft. - Annual						
Service Commercial	0	0	0	74,052	74,052	0
Regional Commercial	0	0	0	0	0	217,800

All of the costs and most of the revenues in Table 2 are calculated on a per capita basis including both population and employment from the project site. The per capita cost factors are calculated from information in the 1999/2000 City of Gilroy budget. For services that generate direct user fees, such as Recreation and Community Development (building permits, etc.), the user charges have been netted out of the service costs before calculating the per capita measures. The service population used in the calculations is consistent with a "daytime population" concept that assigns 75 percent of the service burden to the residential population and 25 percent to the job base in the City.

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The property tax is calculated directly from the units values shown in Table 3. The sales tax in the early years is based on per capita spending by project residents. However, as the commercial property comes online, the sales tax shifts to a per sq.ft. calculation on the commercial space, to avoid double-counting resident purchases at the commercial center.

PROJECT IMPACT ON SANTA CLARA COUNTY

The County LAFCO methodology for estimating fiscal impacts to County government addresses the impact of population growth on County services. The residential portion of the project would increase population by 504 persons. The 1,072 jobs in the commercial portion of the project and the four FTE jobs at the Sportspark could generate 2,284 additional population, for a total project impact of 2,788.[3]

The following table indicates the costs and revenues associated with this increase in population. The LAFCo methodology indicates that all population increases have a negative impact on County finances (see Appendix A for the LAFCo base data on costs and revenues). The cumulative negative impact of this project is estimated to exceed $6.6 million by 2010.

[3] Recent ABAG data indicates that Gilroy has about 1.6 workers per household. The average household size is estimated to be 3.43.

TABLE 5

COST/REVENUE IMPACT ON SANTA CLARA COUNTY

	2003	2004	2005	2006	2007	2008	2009	2010
Revenues								
Law and Justice	$13,813	$60,091	$116,176	$221,736	$340,869	$364,249	$388,763	$415,013
Health Services	19,253	83,963	162,720	311,247	479,460	513,392	548,965	587,129
Social Services	32,176	134,763	250,933	461,424	683,630	704,319	724,933	746,561
General Government	13,597	56,351	103,782	188,694	276,263	281,154	285,694	290,345
Subtotal	78,839	335,167	633,611	1,183,101	1,780,222	1,863,115	1,948,355	2,039,048
Expenditures								
Law and Justice	52,061	219,031	409,276	754,602	1,120,029	1,155,174	1,189,493	1,224,717
Health Services	55,006	169,639	317,434	586,027	870,905	899,258	926,975	955,392
Social Services	53,987	224,965	416,589	761,586	1,121,309	1,147,681	1,173,197	1,199,627
General Government	(655)	(6,077)	(17,151)	(41,631)	(75,767)	(91,675)	(107,525)	(123,470)
Subtotal	160,399	607,558	1,126,148	2,060,585	3,036,476	3,110,437	3,182,140	3,256,265
Net (Costs)/Revenue	(81,560)	(272,391)	(492,537)	(377,484)	(1,256,254)	(1,247,323)	(1,233,785)	(1,217,218)
Cumulative	$(81,560)	$(353,952)	$(846,489)	$(1,723,973)	$(2,980,227)	$(4,227,549)	$(5,461,334)	$(6,678,551)

Source: ADE, Inc., based on Santa Clara County LAFCO cost and revenue factors.

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APPENDIX A

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LAFCO COST REVENUE METHODOLOGY

County of Santa Clara

Local Agency Formation Commission

County Government Center, East Wing
70 West Hedding Street, 10th Floor
San Jose, California 95110
(408) 299-3434 FAX 295-1613
Autumn Arias, Executive Director

FISCAL IMPACTS OF LAFCO PROPOSALS

It is a LAFCO requirement that applicants provide information regarding the fiscal impacts of proposals upon affected local agencies. Affected agencies usually include the city, county and elementary and high school districts, but certain proposals may have a fiscal impact upon other agencies as well. The LAFCO executive director should be contacted regarding which types of districts should be included in the analysis.

The attached tables have been prepared by the County Office of Budget and Analysis, for use in estimating the fiscal impact of development proposals upon Santa Clara County Government. **Fiscal impacts to the city and any affected special districts will also need to be analyzed.** These agencies should be contacted directly to receive information regarding fiscal impacts.

The fiscal impacts to affected agencies other than the county should be analyzed for the same base years, and should be formatted in the same cost vs. revenue manner. Please call LAFCO Executive Director Autumn Arias at 299-3800, extension 7027, if you have any questions regarding either the County Government tables or the fiscal analysis process in general.

FISCAL IMPACTS TO COUNTY GOVERNMENT:

The attached tables depict fiscal impacts on a per capita basis. One table indicates the per capita costs to the County General Fund and the other table depicts the per capita **revenues** that would be realized by the County General Fund.

To use these worksheets, the number of residents generated by a specific proposal should first be determined. This number can then be multiplied by the per capita figures in each category. The analysis should include the following information:

Fiscal Years: Analysis should be performed for the fiscal year in which the project is proposed to be built, as well as five years and ten years from this base fiscal year (example: FY 1998, 2003 & 2008). The year (or estimated year) of annexation should be used as the base year, if the project construction date is unknown.

(-more-)

Commissioners: Blanca Alvarado, Margie Fernandes, Pat Figueroa, Michael M. Honda, Susan Vicklund Wilson
Commission Secretary: (408) 299-4331

Post-it® Fax Note 7671	Date 10/26/98	# of pages ▶ 4
To DOUG SVENSSON	From RICHARD JAMES	
Co./Dept ADE	Co. EMC PLANNING	
Phone #	Phone #	
Fax #	Fax #	

Costs to County Government: For each year to be analysed, show the breakdown of costs to each of the four major areas shown in the table: Law & Justice (L & J), Health (Hlth), Social Services (SocSvcs), and General Government (GenGovt). Also show the total General Fund expenditures (GFEx) for each year.

Revenues to County Government: For each year to be analyzed, show the breakdown of costs by subject area, as well as total revenues for each year.

March 1996

PER CAPITA GENERAL FUND REVENUES IN PRESENT/FUTURE DOLLARS

(General Fund Law & Justice, Health, Social Services, General Gov't.)

L&J	Hlth	SocSvcs	Other GenGovt	
47.56	64.07	167.37	77.18	1993
50.86	68.82	171.20	78.35	1994
54.29	73.75	174.93	79.42	1995
57.93	79.01	178.89	80.56	1996
62.06	84.97	183.64	82.06	1997
66.39	91.21	188.47	83.50	1998
71.09	97.98	193.78	85.10	1999
76.14	105.26	199.39	86.77	2000
81.65	113.20	205.52	88.60	2001
87.49	121.63	211.81	90.42	2002
93.69	130.59	218.25	92.23	2003
100.26	140.09	224.85	94.02	2004
107.23	150.19	231.61	95.79	2005
114.62	160.89	238.52	97.54	2006
122.46	172.25	245.60	99.25	2007
130.76	184.30	252.84	100.93	2008
139.56	197.07	260.24	102.56	2009
148.87	210.61	267.80	104.15	2010

Per Capita General Fund Costs in Past/Future Year Dollars
(General-Fund Law & Justice, Health, Social Services, General Govt.)

Per Capita Costs in Past/Future Year Dollars

FY	SCCo CPI	GFEx	L&J	Hlth	SocSvcs	GenGovt
1984	104.0	$335.96	$82.93	$43.11	$133.99	$75.93
1985	108.4	$364.27	$96.38	$47.98	$136.44	$83.48
1986	111.6	$389.39	$107.85	$55.44	$153.20	$72.91
1987	115.4	$430.47	$113.89	$69.01	$170.56	$77.02
1988	120.5	$448.35	$126.08	$73.35	$179.64	$69.28
1989	126.4	$488.11	$146.51	$80.32	$189.96	$71.32
1990	132.1	$536.23	$173.93	$90.09	$205.30	$66.91
1991	137.9	$603.12	$188.15	$100.47	$233.89	$80.60
1992	142.0	$675.29	$208.53	$156.81	$254.22	$55.73
1993	147.3	$725.83	$228.47	$172.49	$272.74	$52.13
1994	152.4	$749.94	$240.24	$182.01	$281.29	$46.39
1995	157.6	$774.69	$252.20	$191.69	$290.10	$40.71
1996	163.1	$800.94	$264.65	$201.73	$299.46	$35.10
1997	169.5	$829.64	$277.92	$212.41	$309.73	$29.57
1998	176.1	$855.24	$290.18	$222.31	$318.85	$23.91
1999	183.3	$882.54	$303.01	$232.65	$328.60	$18.28
2000	191.0	$909.06	$315.59	$242.80	$338.06	$12.61
2001	199.4	$936.53	$328.51	$253.21	$347.87	$6.94
2002	208.2	$962.26	$340.82	$263.15	$357.03	$1.25
2003	217.3	$987.98	$353.13	$273.10	$366.19	($4.44)
2004	226.9	$1,013.70	$365.45	$283.04	$375.35	($10.14)
2005	236.9	$1,039.43	$377.76	$292.99	$384.51	($15.83)
2006	247.3	$1,065.15	$390.07	$302.93	$393.68	($21.52)
2007	258.2	$1,090.88	$402.38	$312.88	$402.84	($27.22)
2008	269.5	$1,116.60	$414.69	$322.82	$412.00	($32.91)
2009	281.4	$1,142.33	$427.01	$332.77	$421.16	($38.60)
2010	293.8	$1,168.05	$439.32	$342.71	$430.32	($44.29)

Appendix E

Mitigation Monitoring
Program

Mitigation Monitoring Program for Gilroy Urban Service Area Amendment 98-02 Subsequent EIR

Introduction

CEQA Guidelines section 15097 requires public agencies to adopt reporting or monitoring programs when they approve projects subject to an environmental impact report or a negative declaration that includes mitigation measures to avoid significant adverse environmental effects. The reporting or monitoring program is to be designed to ensure compliance with conditions of project approval during project implementation in order to avoid significant adverse environmental effects.

The law was passed in response to historic non-implementation of mitigation measures presented in environmental documents and subsequently adopted as conditions of project approval. In addition, monitoring ensures that mitigation measures are implemented and thereby provides a mechanism to evaluate the effectiveness of the mitigation measures.

A definitive set of project conditions would include enough detailed information and enforcement procedures to ensure the measure's compliance. This monitoring program is designed to provide a mechanism to ensure that mitigation measures and subsequent conditions of project approval are implemented.

Monitoring Program

The basis for this monitoring program is the mitigation measures included in the environmental impact report. These mitigation measures are designed to eliminate or reduce significant adverse environmental effects to less than significant levels. These mitigation measures become conditions of project approval, which the project proponent is required to complete during and after implementation of the proposed project.

The attached checklist is proposed for monitoring the implementation of the mitigation measures. This monitoring checklist contains all appropriate mitigation measures in the environmental impact report.

Monitoring Program Procedures

The City of Gilroy shall use the attached monitoring checklist for the proposed project. The monitoring program should be implemented as follows:

1. The Gilroy Community Development Department should be responsible for coordination of the monitoring program, including the monitoring checklist. The Community Development Department should be responsible for completing the monitoring checklist and distributing the checklist to the responsible individuals or agencies for their use in monitoring the mitigation measures.

2. Each responsible individual or agency will then be responsible for determining whether the mitigation measures contained in the monitoring checklist have been complied with. Once all mitigation measures have been complied with, the responsible individual or agency should submit a copy of the monitoring checklist to the Community Development Department to be placed in the project file. If the mitigation measure has not been complied with, the monitoring checklist should not be returned to the Community Development Department.

3. The Gilroy Community Development Department will review the checklist to ensure that appropriate mitigation measures and additional conditions of project approval included in the monitoring checklist have been complied with at the appropriate time, e.g. prior to issuance of a use permit, etc. Compliance with mitigation measures is required for project approvals.

4. If a responsible individual or agency determines that a non-compliance has occurred, a written notice should be delivered by certified mail to the project proponent within 10 days, with a copy to the Community Development Department, describing the non-compliance and requiring compliance within a specified period of time. If a non-compliance still exists at the expiration of the specified period of time, construction may be halted and fines may be imposed at the discretion of the City of Gilroy.

Responsible Parties and Timing of Implementation and Monitoring

The following table lists the parties responsible for implementing and monitoring each mitigation measures at each stage of the proposed project. The party(ies) responsible for implementation of the mitigation measure is (are) indicated by italics. The party(ies) responsible for monitoring the mitigation measure is (are) indicated by bold text. A key to abbreviations is located following the table.

	Implementation Timeframe					
Mitigation Measure Number	**Final Map**	**Project Plans Permits**	**Prior/During Grading**	**Prior/During Construction**	**Prior to Occupancy**	**Post Development**
1		*A* PLN			*A* PLN	*A* PLN
2			*A* A, BLD, PLN	*A* A, BLD, PLN		
3		*A* PLN			*A* PLN	*A* PLN
4			*A* 1; PLN			
5			*A* 1, PLN, CDFG			
6			*A* 1, PLN	*A* 1, PLN		
7			*A* PLN	*A* PLN		
8	*A* ENG	*A* ENG				
9			*A* PLN	*A* PLN		
10			*A* 2, PLN	*A* 2, PLN		
11			*A* 2, PLN	*A* 2, PLN		
12			*A* COR,NAHC	*A* COR,NAHC		
13		*A, 3* ENG, SCVWD				
14		*A* RWQCB, ENG	*A* A, ENG	*A* A, ENG		
15		*A* SCVWD	*A* SCVWD	*A* SCVWD		
16	*A* ENG	*A* ENG	*A* ENG	*A* ENG		*A* ENG
17	*A* CD				*A* CD	
18		*A* BLD			*A* BLD	
19		*A* ENG	*A* A, ENG, BLD	*A* A, ENG, BLD		
20	*A, ATT* ENG	*A, ATT* ENG				
21	*A, ATT* ENG	*A, ATT* ENG				
22	*A, ATT* ENG	*A, ATT* ENG				
23	*A, ATT* ENG	*A, ATT* ENG				
24	*A, ATT* ENG	*A, ATT* ENG				

Principal Responsible Parties: A: Applicant or designee; ATT: Gilroy City Attorney; BLD: Gilroy Building Division; CD: Gilroy Community Development Department; CDFG: California Department of Fish and Game; COR: Santa Clara County Coroner; ENG: Gilroy Engineering Division; NAHC: Native American Heritage Commission; PLN: Gilroy Planning Division; RWQCB: Central Coast Regional Water Quality Control Board; SCVWD: Santa Clara Valley Water District.

Other Responsible Parties and Specialized Consultants: 1: Biologist; 2: Archeologist; 3: Hydrologist.

The text of the mitigation measures and the role of each responsible party is listed in the following table.

Mitigation Measure Number	Text of Mitigation Measure	Implementing Party	Monitoring Party
1	Subject to the review and approval of the City of Gilroy Planning Division, prior to approval of a tentative subdivision map, the applicant for residential development on the parcels north of the sports park shall provide a landscape plan that is consistent with the Gilroy Consolidated Landscape Policy, and includes a double row of trees along the sports park boundary, utilizing tree species that will attain a crown between 30 and 50 feet above street level. One row of trees may be planted on the sports park side of the shared property boundary. The plantings shall be a minimum size of 24-inch boxed specimens and shall be planted prior to occupancy of the houses located within 100 feet of the sports park.	Applicant shall prepare plan, install plantings prior to occupancy, and replace any plants that fail to grow adequately for the first five years following initial occupancy	Gilroy Planning Division shall ensure that the landscape plans meet requirements, and shall conduct annual monitoring for five years following initial occupancy to ensure trees are growing adequately.
2	The following dust control measures shall be incorporated into all permits for any phase of proposed construction on the project site. The measures shall be implemented as necessary to adequately control dust subject to the review and approval of the City of Gilroy Planning Division. The following measures shall be implemented at all construction sites: • Water all active construction areas at least twice daily; • 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. The following additional measures shall be implemented at construction sites greater than four acres in area: • 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 mph; • Install sandbags or other erosion control measures to prevent silt runoff to public roadways; • Replant vegetation in disturbed areas as quickly as possible. Subject to determination by the Gilroy Planning Division the following measures shall be implemented at construction sites that are very large or are located near sensitive receptors: • Install wheel washers for all existing trucks, or wash off the tires or tracks of all trucks and equipment leaving the site; • Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) of construction areas; • Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 miles per hour; • Limit the area subject to excavation, grading and other construction activity at any one time.	Applicant shall implement dust control measures as necessary to control the migration of visible dust off site.	Gilroy Planning Division shall ensure that all permits issued include dust control requirements. The construction manager shall note implementation of dust control measures in the construction log and provide a copy of the log to the City at the end of each week. Gilroy Planning Division shall review construction logs weekly for the initial four weeks and monthly thereafter. Gilroy Building Division shall investigate reported violations.

3	A landscape plan consistent with the Gilroy Consolidated Landscape Policy shall be prepared for common and street side planting areas abutting the Uvas Creek habitat corridor, subject to the review and approval of the City of Gilroy Planning Division. The landscape plan shall include appropriate native plant species and shall not include plantings of non-native, invasive plant species. Native grasses or other native species shall be preferred in the areas adjacent to the Uvas Creek levee to provide additional native habitat in association with the Uvas Creek habitat corridor.	Applicant shall prepare plan and install plantings, and replace any plants that fail to grow adequately during the first year.	Gilroy Planning Division shall review the plans and inspect the plantings following installation, and shall ensure that the landscape plans meet requirements, and shall conduct monitoring following planting and one year later to ensure plants are growing adequately.
4	Subject to the review of the City of Gilroy Planning Division, no earlier than 45 days and no later than 20 days prior to commencement of clearing, grading or construction in or adjacent to any riparian habitat, a field survey shall be conducted by a qualified biologist to determine if active raptor nests are present in the construction zone or within 250 feet of the construction zone. These surveys shall be required only if any construction would occur during the nesting and/or breeding season of raptors potentially nesting in the areas proposed for development (generally March 1 through August 1). If active nests are found within the survey area, at the discretion of the biologist, clearing and construction within 250 feet shall be postponed or halted until the nests are vacated and juveniles have fledged and there is no evidence of a second attempt at nesting.	Applicant shall arrange for the surveys, and shall abide by the determinations of the biologist.	Qualified biologist shall conduct surveys, and report results to the applicant and the Gilroy Planning Division. Gilroy Planning Division shall approve the selection of the biologist and review the biologist's reports.
5	Subject to the review of the City of Gilroy Planning Division, no earlier than 45 days and no later than 20 days prior to commencement of grading or construction on or adjacent to the slope of the levee, field surveys shall be conducted at least four consecutive evenings by a qualified biologist to determine if burrowing owls are present in the construction zone or within 250 feet of the construction zone. These surveys shall be required only if any construction would occur during the nesting and/or breeding season of burrowing owls potentially nesting in the area (February 1 through August 31) and/or during the winter residency period (December 1 and January 31). Pre-construction survey results shall be submitted to the California Department of Fish and Game for review and approval. If active nests are found within the survey area, a burrowing owl habitat mitigation plan shall be submitted to the California Department of Fish and Game for review and approval. The burrowing owl habitat mitigation plan shall contain mitigation measures contained in the California Department of Fish and Game Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 1995). Compliance with this mitigation measure may include, but not be limited to, the following: • Avoidance of occupied burrows during the nesting season (February 1 through August 31); • Acquisition, protection and funding for long-term management and monitoring of foraging habitat adjacent to occupied habitat; • Enhancement of existing burrows and/or creation of new burrows; • Passive relocation of burrowing owls.	Applicant shall arrange for the surveys, and shall abide by the determinations of the biologist, and the provisions of the mitigation program.	Qualified biologist shall conduct surveys, and report results to the California Department of Fish and Game, the applicant, and the Gilroy Planning Division. Gilroy Planning Division shall approve the selection of the biologist and review the biologist's reports. California Department of Fish and Game shall review the reports and the mitigation plan, and shall monitor compliance with the mitigation plan.
6	Prior to commencement of construction activities, the applicant shall arrange for a qualified biologist to inform workers of the potential presence of the all special-status species, their protected status, work boundaries, and measures to be implemented to avoid loss of these species during construction activities.	Applicant shall arrange for a qualified biologist to educate workers.	Gilroy Planning Division shall approve the selection of the biologist. Biologist shall inform the Gilroy Planning Division of completed educational sessions.
7	All food-related trash items shall be enclosed in sealed containers and regularly removed from the project area to deter attraction of potential predators of the California red-legged frog, foothill yellow-legged frog, western spadefoot toad, California tiger salamander, and western pond turtle. Pets shall not be allowed on the construction site. The proper location of the trash containers shall be subject to the review and approval of the City of Gilroy Community Development Department.	Applicant shall place trash containers at approved locations.	Gilroy Community Development Department shall review proposed placement of trash containers.

8	Subject to the review and approval of the City of Gilroy Planning Division, luminaires in the proposed residential area shall be limited in height to 20 feet and shall be of a full cutoff design to reduce light spillage to adjacent areas. Luminaires located along a street adjacent to the Uvas Creek levee shall be located to the east side of the street.	Applicant shall indicate the height and placement of luminaires on Final Maps and project plans..	Gilroy Engineering Division shall review Final Map and project plans.
9	Prior to removal of any of the potentially historic houses on the project site an historical evaluation shall be completed. The historic evaluation shall include an architectural description of the structure, an historic background for the property and the completion of an appropriate State Department of Parks and Recreation form with photographic documentation.	Applicant shall have an historical evaluation performed and follow the recommendations of the report.	Gilroy Planning Division shall review the historic report and determine the appropriate measures.
10	The developers for any portion of the project site shall contract with a qualified archaeologist to arrange a schedule for monitoring during grading and excavation activities due to the project site's creek-side location and proximity to recorded historic and prehistoric sites.	Applicant shall arrange for the archeological monitoring at least once per day during grading and excavation.	Archeologist shall provide weekly reports of site monitoring to the Gilroy Planning Division, and halt work if significant resources are discovered.
11	Due to the possibility that significant buried cultural resources might be found during construction the following language shall be included any permits issued for the project site, including, but not limited to building permits for future development, subject to the review and approval of the Gilroy Planning Division: If archaeological resources or human remains are discovered during construction, work shall be halted at a minimum of 200 feet from the find and the area shall be staked off. The project developer shall notify a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented.	Applicant shall halt work if archaeological resources or human remains are discovered on the project site, and notify a qualified archeologist.	Archeologist shall investigate finds, and report immediately to the Gilroy Planning Division if significant resources are discovered. Gilroy Planning Division shall consult with the archeologist to develop appropriate measures.
12	In the event of an accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall ensure that this language is included in all permits in accordance with CEQA Guidelines section 15064.5(e): If human remains are found during construction there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of Santa Clara County is contacted to determine that no investigation of the cause of death is required. If the coroner determines the remains to be Native American the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code Section 5097.98. The landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if: a) the Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission; b) the descendent identified fails to make a recommendation; or c) the landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner	Applicant shall halt work if human remains are discovered on the project site, and notify the Santa Clara County Coroner.	Coroner shall investigate finds, and report to the Native American Heritage Commission within 24 hours if the remains are determined to be of Native Americans. The Native American Heritage Commission shall identify likely descendants.

13	Any applicant for development within FEMA-delineated 100-year flood zones on the project site shall have a hydrology report prepared for that development by a qualified hydrologist or engineer, to specify hydrology-related design requirements for the site and buildings, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to issuance of a building permit. The hydrology report shall address the following requirements: • Site plans and building designs shall comply with the City of Gilroy Flood Plain Control Ordinance. • Development on the project site shall not impede the flow of floodwaters. • Procedures shall be developed and site plans designed that will assure that any materials, supplies or goods used, stored or hold for sale at the proposed use that may present health hazards or risks of water contamination during flood conditions are securely kept at least one foot above the 100-year flood level. • Development on the project site shall not result in an increase in floodwater levels off the project site. Calculations for both the 25-year and 100-year flood events shall be submitted in support of these requirements. All grading, design or other recommendations of the hydrology report shall be incorporated into project plans.	Applicant shall have a hydrological report prepared, and incorporate the recommendations into project plans.	Gilroy Engineering Division shall approve the hydrologist, review the hydrology report, and review project plans to ensure that the recommendations of the report are adequately addressed in the project plans. SCVWD shall review project plans to ensure that the recommendations of the report are adequately addressed in the project plans.
14	The project applicant for any proposed development, shall, for each phase of the development, submit a Notice of Intent (NOI) and detailed engineering designs to the Central Coast RWQCB. This permit shall require development and implementation of a SWPPP that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site. The SWPPP must include Best Management Practices that address source reduction and, if necessary, shall include practices that require treatment. The SWPPP shall be submitted to the City of Gilroy Engineering Division for review and approval prior to approval of a building permit for each phase of the project.	Applicant shall submit NOI, proposed SWPPP, and engineering designs to the Central Coast RWQCB.	Central Coast RWQCB shall review and approve a SWPPP for the proposed project. Gilroy Engineering Division shall review project plans to ensure that the SWPPP is adequately addressed on project plans. The construction manager shall note implementation of SWPPP measures in the construction log and provide a copy of the log to the City at the end of each week. Gilroy Engineering Division shall review construction logs weekly for the initial four weeks, and between November 15 and April 15 and monthly at other times.
15	The project applicant for any proposed development within 50 feet of a waterway or flood flowage easement shall submit plans for review by, and obtain an approved permit from the Santa Clara Valley Water District (SCVWD) prior to approval of a building permit for each phase of the project.	Applicant shall obtain a permit from the SCVWD.	SCVWD shall monitor the project site for compliance with its permit.

16	Project plans for any development proposed for the project site, subject to the review and approval of the City of Gilroy Engineering Division shall include a sedimentation basin adequate for filtering out heavy storm water contaminants such as silt, and grease traps suitable for filtering out other urban pollutants to the extent feasible. Additional measures as presented in "Start at the Source, Design Guidance Manual for Storm Water Quality Protection," prepared by the Bay Area Storm Water Management Agencies Association and "Parking Lot Best Management Practices Manual," prepared by the Santa Clara Valley Urban Run-off Pollution Prevention Program may be required for specific projects. Any physical water quality safeguards shall be installed prior to occupancy of the proposed development, and any best management practices plan must be implemented upon occupancy.	Applicant shall include on the Final Map and construct the required features. Applicant shall prepare any required management plan.	Gilroy Engineering Division shall review plans to ensure that the required features are included on the Final Map, and have been constructed prior to occupancy. Gilroy Engineering Division shall monitor the management plan annually for the first five years to ensure the plan is adequate to safeguard water quality.
17	Subject to the review and approval of the City of Gilroy Community Development Department, the applicant for any residential development on the project site along West Luchessa Avenue shall construct a sound attenuation barrier eight feet in height when measured from the near curb of West Luchessa Avenue. The barrier shall be completed prior to occupancy of any homes on lots adjacent to West Luchessa Avenue.	Applicant shall include noise attenuation barriers on Final Maps and construct prior to occupancy.	Gilroy Community Development Department shall review Final Maps and ensure that the required walls are constructed.
18	Subject to the review and approval of the City of Gilroy Building Division, the applicant for any residential development on the project site shall conduct an acoustical study and establish engineering requirements to be included in construction plans to maintain interior noise levels at no greater than 45 dBA_{DNL}. Interior noise attenuation techniques may include forced air ventilation or air conditioning for all habitable rooms with a window facing noise sources, triple-paned windows, sound insulation or other appropriate means that will reduce interior noise levels to no greater than 45 dBA_{DNL}.	Applicant shall have an acoustical study prepared and incorporate engineering and design requirements in project plans.	Gilroy Building Division shall review project plans to ensure that the recommendations of the acoustical study are adequately addressed.
19	The following language shall be included on any permits issued at the project site, subject to the review and approval of the City of Gilroy Engineering Division. "All noise generating construction activities shall be limited to weekdays between 7:00 AM and 7:00 PM, and to Saturdays and City holidays between 9:00 AM and 7:00 PM. No construction is allowed on Sundays. In addition, temporary berms or noise attenuation barriers shall be utilized when necessary."	Applicant shall limit noise-generating construction to the hours listed.	The construction manager shall note hours of noise-generating construction activities in the construction log and provide a copy of the log to the City at the end of each week. Gilroy Engineering Division shall review construction logs. Gilroy Building Division shall investigate reported violations.
20	The following street improvements shall be made to the intersection of West Luchessa Avenue and Church Street: • installation of a traffic signal with two-phase operation; • re-configuration of the northbound and southbound approaches as necessary to provide one approach lane for all movements; • provision of one left-turn lane and one shared through and right-turn lane on the eastbound and westbound approaches. The street improvements shall be implemented at such time as determined by the City of Gilroy traffic-monitoring program or a project -specific traffic analysis, and at such time as to prevent the deterioration of traffic operations below acceptable levels. Construction of the improvements shall be required as a condition of approval for the applicable project. Improvements may be subject to a reimbursement agreement.	Applicant for applicable project shall include the listed improvements in project plans, and shall implement the improvements within nine months of notification by the City of Gilroy Engineering Division. Gilroy City Attorney shall prepare a reimbursement agreement applicable to all projects in the amendment area	Gilroy Engineering Division shall determine the timing for the listed improvements as part of its traffic monitoring program, and provide notice to the applicant for the appropriate project upon determining that the improvements are required.

21	The following street improvements shall be made to the intersection of Monterey Street and Luchessa Avenue: • construction of a second northbound left-turn lane and an exclusive eastbound right-turn lane; • addition of a right-turn arrow for the eastbound right-turn movement (so vehicles in this movement could move while the northbound left-turn movement has a green arrow). The street improvements shall be implemented at such time as determined by the City of Gilroy traffic-monitoring program or a project -specific traffic analysis, and at such time as to prevent the deterioration of traffic operations below acceptable levels. Construction of the improvements shall be required as a condition of approval for the applicable project. Improvements may be subject to a reimbursement agreement.	Applicant for applicable project shall include the listed improvements in project plans, and shall implement the improvements within nine months of notification by the City of Gilroy Engineering Division. Gilroy City Attorney shall prepare a reimbursement agreement applicable to all projects in the amendment area.	Gilroy Engineering Division shall determine the timing for the listed improvements as part of its traffic monitoring program, and provide notice to the applicant for the appropriate project upon determining that the improvements are required.
22	Following or in conjunction with the signalization of the intersection of Monterey Street and Monterey Frontage Road, the following street improvements shall be made: • re-configuration of the southbound approach as necessary to provide one left-turn lane, two through lanes, two right-turn lanes; • re-configuration of the westbound approach as necessary to provide one shared lane for all movements; • re-configuration of the northbound approach as necessary to two left-turn lanes, one through lane, one shared through/right- turn lane; • re-configuration of the eastbound approach as necessary to provide one exclusive left-turn lane, one shared through and left-turn lane, and one right-turn lane. • right-turn arrows shall be provided for the eastbound and southbound right-turn movements to provide LOS C intersection operations during all three study periods. This lane configuration will require split phase operation of the eastbound and westbound approaches. The street improvements shall be implemented at such time as determined by the City of Gilroy traffic-monitoring program or a project -specific traffic analysis, and at such time as to prevent the deterioration of traffic operations below acceptable levels. Construction of the improvements shall be required as a condition of approval for the applicable project. Improvements may be subject to a reimbursement agreement.	Applicant for applicable project shall include the listed improvements in project plans, and shall implement the improvements within nine months of notification by the City of Gilroy Engineering Division. Gilroy City Attorney shall prepare a reimbursement agreement applicable to all projects in the amendment area.	Gilroy Engineering Division shall determine the timing for the listed improvements as part of its traffic monitoring program, and provide notice to the applicant for the appropriate project upon determining that the improvements are required.
23	A right-of-way sufficient for a six-lane arterial shall be dedicated to the City of Gilroy along the West Luchessa Avenue frontage of the project site. The dedication shall be implemented at such time as determined by the City of Gilroy traffic-monitoring program or a project -specific traffic analysis. The dedication shall be implemented at such a time as to allow construction necessary to prevent the deterioration of traffic operations below acceptable levels.	Applicant for any project in the amendment area along West Luchessa Avenue shall include a dedication on the Final Map and/or in project plans	Gilroy Engineering Division shall review Final Map and/or project plans to ensure inclusion of the right-of-way dedication.

24	West Luchessa Avenue shall be widened to four lanes between Monterey Street and Princevalle Street. The street improvements shall be implemented at such time as determined by the City of Gilroy traffic-monitoring program or a project -specific traffic analysis, and at such time as to prevent the deterioration of traffic operations below acceptable levels. Construction of the improvements shall be required as a condition of approval for the applicable project. Improvements may be subject to a reimbursement agreement.	Applicant for applicable project shall include the listed improvements in project plans, and shall implement the improvements within nine months of notification by the City of Gilroy Engineering Division. Gilroy City Attorney shall prepare a reimbursement agreement applicable to all projects in the amendment area.	Gilroy Engineering Division shall determine the timing for the listed improvements as part of its traffic monitoring program, and provide notice to the applicant for the appropriate project upon determining that the improvements are required.

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GILROY URBAN SERVICE AREA AMENDMENT 98-03

SUBSEQUENT ENVIRONMENTAL IMPACT REPORT DRAFT

PREPARED FOR

City of Gilroy Planning Division

April 2000

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EMC PLANNING GROUP INC.
A LAND USE PLANNING & DESIGN FIRM
501 Abrego Avenue, Suite C, Monterey, California 93940 Tel 831.649-1799 Fax 831.649-8399 www.emcplanning.com

GILROY URBAN SERVICE AREA AMENDMENT 98-03

SUBSEQUENT ENVIRONMENTAL IMPACT REPORT DRAFT

PREPARED FOR

City of Gilroy Planning Division
7351 Rosanna Street
Gilroy, California 95020
(408) 846-0440
Contact: Bryan Stice

PREPARED BY

EMC Planning Group Inc
301 Lighthouse Avenue Suite C
Monterey CA 93940
Tel 831.649.1799
Fax 831.649.8399
emcgroup@emcplanning.com
www.emcplanning.com

April 2000

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Summary

Project Background and History

To address a lack of sports facilities for City residents, the City of Gilroy proposed the construction of a sports park on land immediately south of the City. The proposed project included the construction of the sports park and related off-site improvements and a USA amendment request for the 78.36-acre sports park site and 61.85 acres of surrounding land. Because only a 100-foot wide driveway connected the sports park site to the existing USA, the surrounding land was included in the USA amendment to make the amendment area more contiguous to the existing USA. The City of Gilroy certified the EIR for the sports park and USA amendment and approved the sports park master plan on June 7, 1999. A USA amendment request was submitted to the Santa Clara County LAFCo on June 23, 1999.

Santa Clara County LAFCo requested additional environmental review of the USA amendment request based on proposed new land use designations in the *Draft Gilroy 1999-2020 General Plan*. The parcels that were a part of the USA amendment request but not proposed for sports park development were analyzed in the certified EIR based on the existing *Gilroy General Plan* designation of OPEN SPACE. The *Draft Gilroy 1999-2020 General Plan* designates 27.72 acres of this area as RESIDENTIAL – NEIGHBORHOOD DISTRICT and the remaining 27.13 acres of this area as COMMERCIAL – GENERAL SERVICES. This SEIR addresses the anticipated change in general plan designation for these parcels.

Proposed Project

The proposed project includes a USA amendment for the entire 140.21-acre project site, which includes the *approved* Gilroy Sports park and habitat buffer on 78.36 acres, an *approved* trail extension and habitat buffer on 7.00 acres, *proposed* residential development on 27.72 acres and *proposed* commercial land uses on 27.13 acres.

The entire 140.21-acre project site is proposed for inclusion into the City' s USA, and annexation to the city. The proposed project includes 27.13 acres designated in the *Draft Gilroy 1999-2020 General Plan* as COMMERCIAL – GENERAL SERVICES. Commercial development would take place on two portions of the project site along Monterey Frontage Road, straddling the sports park entry road. Two parcels totaling 12.12 acres are located north of the sports park entry road and four parcels totaling 15.01 acres are located south of the sports park entry road. The proposed project includes 27.72 acres designated in the *Draft Gilroy 1999-2020 General Plan* as

RESIDENTIAL – NEIGHBORHOOD DISTRICT. The residential area would be immediately north of the approved Gilroy Sports Park and the area proposed for COMMERCIAL – GENERAL SERVICES designation along Monterey Street and Monterey Frontage Road.

Summary of Impacts and Mitigation Measures

Pursuant to CEQA Guidelines section 15063 an initial study was prepared to determine the potentially significant effects of the proposed project. The initial study determined that certain issues would have a potentially significant impact on the environment. These issues concerned agricultural considerations, geology, hydrology, public services and service systems, biological resources, transportation/circulation, air quality, noise, archaeological resources, and aesthetics. Those issues determined to have a potentially significant environmental impact were studied in greater depth in an EIR. The City of Gilroy certified that EIR on June 7, 1999. Based on proposed new land use designations in the *Draft Gilroy 1999-2020 General Plan*, this SEIR was prepared for the annexation of the entire project site and for commercial and residential development on land previously studied as open space. Environmental impacts and proposed mitigation measures for the proposed project are presented in Table S-1.

Summary of Other CEQA Considerations

Unavoidable Significant Adverse Environmental Impacts

An unavoidable significant adverse environmental impact is a significant adverse impact that cannot be reduced to a less than significant level through the implementation of mitigation measures. CEQA Guidelines section 15093 requires that a lead agency make findings of overriding considerations for unavoidable significant adverse environmental impacts before approving a proposed project.

The loss of prime farmland is considered a significant and unavoidable adverse environmental impact. The proposed project would result in the loss of the 54.8 acres of prime farmland (though some of this land is used for commercial and rural residential uses). In conjunction with the approved Gilroy Sports Park, which is within the project site, the loss of prime farmland would be 133.21 acres. The implementation of the Gilroy Agricultural Lands Area by both the City of Gilroy and the County of Santa Clara serves as a partial mitigation for losses of prime farmland in southern Santa Clara County. However, it does not reduce the loss of prime farmland to a less than significant level and the proposed project would still be considered to have a significant and unavoidable impact on prime farmland.

Cumulative Impacts

Cumulative impacts are those environmental impacts resulting from the cumulative effects of approved but not yet built projects and probable projects in the area of the proposed project. Cumulative impacts were based on projects in the southern part of Gilroy. Investigation indicated that the proposed project might make significant contributions to cumulative impacts in the areas of agricultural resources, air quality hydrology, and transportation/circulation. Cumulative impacts to agricultural resources were determined to be significant and unavoidable. Cumulative impacts to transportation were found to be mitigated to a less than significant level by project level mitigation measures. No cumulative impacts were found in the areas of air quality and hydrology.

Agricultural Considerations

The proposed project would add 133.2 acres of prime farmland to the City of Gilroy Urban Service Area. Land within the Urban Service Area is generally expected to be developed within an approximate five-year timeframe. Prime farmland is a non-replaceable resource. Each cumulative project that involves the conversion of prime farmland to non-agricultural uses contributes to the depletion of this resource.

Transportation/Circulation

A traffic impact assessment prepared for the proposed project determined that the increase in traffic associated with the proposed project and other proposed or existing development would result in traffic congestion at three intersections and along one roadway segment. Mitigation measures in Section 2.14 Transportation/ Circulation would reduce this impact to a less than significant level.

Significant Irreversible Environmental Changes

The proposed project would result in the permanent loss of prime agricultural land. While this loss is mitigated in part by the establishment of the Gilroy Agricultural Lands Area, the prime agricultural land lost to the proposed project is not replaceable. The loss of prime agricultural land would be a significant irreversible change.

Growth Inducing Impacts

The proposed project itself is an extension of urban services into a previously un-served area. Although all urban service infrastructure is currently available near the project site, the approval of the USA amendment would make that infrastructure available to the project site itself and would result in future growth and development in that area.

The project site is currently within the City of Gilroy 20-year development area. The proposed project would transfer the project site into the City of Gilroy USA. Provision of urban services and development within a USA is generally expected to occur within an approximate five-year timeframe. The Gilroy Sports Park has previously been approved for a portion of the project site, and a residential development is undergoing the RDO process for the northern portion of the project site. Approval of the USA amendment request would encourage and facilitate development within the project site.

Extension of services to the southern parcels on the project site and development of these parcels could result in development pressure on the land south of the project site. Although this area is designated in the *Draft Gilroy 1999-2020 General Plan* as OPEN SPACE, the landowners may request a USA amendment and a change in general plan designation to open their land to development. Similar pressures may be felt to the west of Uvas Creek where a finger of land less than one-half mile wide would remain outside the Gilroy USA. These areas were included in the *Water Master Plan* and the *Sewer Master Plan*.

Summary of Alternatives Analysis

The following alternatives to the proposed project were analyzed to determine if they would achieve project objectives while minimizing environmental impacts. The following project alternatives were analyzed:

- Alternative #1 "No Project" alternative; The USA request is not approved by Santa Clara County LAFCo and no development takes place on the portion of the project site outside the sports park. The approved sports park is developed outside the urban service area at its approved location.

- Alternative #2 Reduced Project Size alternative; The USA request is reduced by 15.01 acres by eliminating the four parcels located south of the sports park access road. The resulting project site has a total of 125.20 acres, with 27.72 acres of proposed residential area and 12.12 acres of proposed commercial area. The sports park is added to the USA as part of this alternative.

- Alternative #3 Alternative Site alternative; An addition to the Gilroy USA is made on the west side of Monterey Street at Day Road in northern Gilroy. The project has approximately 25 acres of proposed residential area and 25 acres of proposed commercial area. The approved sports park is developed outside the USA at its already approved location.

The "No Project " alternative is the environmentally superior alternative, because it eliminates the unavoidable significant impact of loss of prime farmland and it results in reduced environmental impacts. Although there are no environmental impacts for the "No Project" alternative, it does result in the highest water use

because it retains the project site in water-intensive agricultural use. For this reason it is considered worse than the proposed project and other alternatives in terms of impacts to the water supply.

The Reduced Project Size alternative is the next best alternative. It reduces the magnitude of the unavoidable significant impact to agricultural resources, and also reduces impacts on air quality, hydrology and transportation. The Reduced Project Size alternative would not significantly reduce the potential noise impacts at the residential development along Monterey Road and West Luchessa Avenue. If mitigation fails to fully mitigate noise in those areas, the noise impacts would be significant and unavoidable.

The Alternative Site alternative reduces conversion of agricultural land, and especially conversion of Prime Farmland. More of the Alternative Site is already developed than the project site. The Alternative Site alternative may have slightly reduced impacts on biological resources, and would eliminate the possibility of a significant unavoidable impact from noise. The Alternative Site alternative also reduces the hydrological impacts of the proposed project.

TABLE S-1

Summary of Impacts and Mitigation Measures

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Aesthetics	**Change in Rural Character** Development of the project site would permanently alter the existing rural character of the area. The view from U.S. Highway 101 would become more urban than it is currently. However, surrounding parcels to the north and east are already developed and the approved sports park will provide an area of transition between the built and rural environments.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Aesthetics	**Nighttime Lighting** The proposed project would place residences near the planned athletic field lights of the approved Gilroy Sports Park. Several of the planned lights are within 400 to 500 feet of, and aimed towards the nearest homes. These field lights would be directly visible from these houses' windows.	**Potentially Significant**	1	Residential development on the parcels north of the sports park shall provide a landscape plan that includes a double row of trees along the sports park boundary, utilizing tree species that will attain a crown between 30 and 50 feet above street level prior to occupancy of the houses located within 100 feet of the sports park.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Agricultural Resources	**Loss of Prime Farmland** Approval of the Urban Service Area amendment and development of parcels adjacent to the sports park site, would result in the loss of 54.85 acres of designated prime farmland. Approximately 49.85 acres of this farmland would be converted from agricultural production. **Cumulative Project Loss of Prime Farmland.** Approval of the Urban Service Area amendment and development of parcels adjacent to the sports park site, in conjunction with development of the approved sports park, would result in the loss of 133.21 acres of designated prime farmland. Approximately 128.21 acres of this farmland would be converted from agricultural production.	**Unavoidable Significant**	N/A	The establishment of the Gilroy Agricultural Lands Area by both the City of Gilroy and the County of Santa Clara serves as a regional mitigation for losses of prime farmland in southern Santa Clara County outside of the agricultural lands area. Although this regional mitigation has been implemented, it does not reduce the loss of prime farmland to a less than significant level and the proposed project would still be considered to have a significant and unavoidable impact on prime farmland.	**Unavoidable Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Agricultural Resources	**Conflict With Williamson Act Contract.** Six of the parcels on the project site were previously under Williamson Act contract. None of these contracts is currently in effect. The parcels most recently in Williamson Act contract were non-renewed effective in January 1999.	**No Impact**	N/A	None Required	**No Impact**
Agricultural Resources	**Effect on Adjacent Agricultural Uses.** Implementation of the proposed project could induce the adjacent farmland to the south of the project site and nearby farmland to the west of the project site to be converted to non-agricultural uses. These parcels adjacent to the project site are within the proposed City of Gilroy 20-year planning area but are proposed to be designated for open space uses. Development pressures could result in a change of general plan designation and subsequent development.	**Potentially Unavoidable Significant**	N/A	The establishment of the Gilroy Agricultural Lands Area by both the City of Gilroy and the County of Santa Clara serves as a regional mitigation for losses of prime farmland in southern Santa Clara County outside of the agricultural lands area. Although this regional mitigation has been implemented, it does not reduce the loss of prime farmland to a less than significant level and the proposed project would still be considered to have a significant and unavoidable impact on prime farmland.	**Potentially Unavoidable Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Air Quality	**Proposed Project Operations** BAAQMD determines the thresholds of significance for general plans, master plans annexations and similar projects based on the project's consistency with the *Clean Air Plan*. The proposed project is consistent with the *Draft Gilroy 1999-2020 General Plan*, which is in turn consistent with the *Clean Air Plan*.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Air Quality	**Project Construction**	**Potentially Significant**	2	Dust control measures shall be incorporated into all permits for any phase of proposed construction on the project site.	**Less Than Significant**
Biological Resources	**Loss of Habitat.** Due to continuous human interaction, agricultural fields typically provide little habitat for wildlife and do not represent a significant biological resource.	**No Impact**	N/A	None Required	**No Impact**
Biological Resources	**Invasive Plant Species.** The riparian habitat along Uvas Creek could be affected by the presence of non-native, invasive plant species.	**Significant**	3	Project plans shall include a habitat buffer designed to include appropriate native plant species and shall not include plantings of non-native, invasive plant species. Wherever possible, the east side of the trail shall be planted with native grasses or other native species to provide additional native habitat.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Raptors.** Construction activities in or near the riparian woodland habitat found along Uvas Creek could result in the direct loss of white-tailed kite, northern harrier, Cooper's hawk, and short-eared owl nests, including eggs and young, or the abandonment of an active nest by the adults.	**Potentially Significant**	4	A field survey shall be conducted by a qualified biologist to determine if active raptor nests are present in the construction zone or within 250 feet of the construction zone if any construction would occur during the nesting and/or breeding season of raptors potentially nesting in the areas proposed for development (generally March 1 through August 1). If active nests are found, at the discretion of the biologist, clearing and construction within 250 feet shall be postponed or halted until the nests are vacated and juveniles have fledged and there is no evidence of a second attempt at nesting.	**Less Than Significant**
Biological Resources	**Burrowing Owls.** Construction activity along the slope of the levee in the northwest corner of the project site, could result in the direct loss of burrowing owl nests, including eggs and young, or the abandonment of an active nest by the adults.	**Potentially Significant**	5	Field surveys shall be conducted to determine if burrowing owls are present in the construction zone or within 250 feet of the construction zone if any construction would occur during the nesting and/or breeding season of burrowing owls potentially nesting in the area (February 1 through August 31) and/or during the winter residency period (December 1 and January 31). If active nests are found, a burrowing owl habitat mitigation plan shall be prepared.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Biological Resources	**Riparian Special-Status Species** Several special-status species may potentially occur in Uvas Creek and in the riparian habitat adjacent to Uvas Creek. Any adverse effects on these special-status species, if present, resulting from construction activities associated with the residential area adjacent to the riparian habitat would be a significant impact.	**Potentially Significant**	6 7	A qualified biologist shall inform workers of the potential presence of the all special-status species, their protected status, work boundaries, and measures to be implemented to avoid loss of these species during construction activities. All food-related trash items shall be enclosed in sealed containers and regularly removed from the project area to deter attraction of potential predators	**Less Than Significant**
Biological Resources	**Effects of Nighttime Lighting on Wildlife** Lighting of roads in the proposed residential area could spill over into the riparian habitat and disturb wildlife, restrict the movement or activity of wildlife, or facilitate increased predation of wildlife species.	**Potentially Significant**	8	Luminaires in the proposed residential area shall be limited in height to 20 feet and shall be of a full cutoff design to reduce light spillage to adjacent areas. Luminaires located along a street adjacent to the Uvas Creek levee shall be located to the east side of the street.	**Less Than Significant**
Cultural Resources	**Historic Houses** The project site contains four potentially historic houses. These houses are likely to be removed to accommodate future development on the project site. The houses may also have significant buried historic resources associated with them.	**Potentially Significant**	9	Prior to removal of any of the potentially historic houses on the project site an historical evaluation shall be completed. The historic evaluation shall include an architectural description of the structure, an historic background for the property and the completion of an appropriate State Department of Parks and Recreation form with photographic documentation	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Cultural Resources	Currently unidentified buried cultural resources may be found during construction on the project site.	**Potentially Significant**	10 11 12	The city shall contract with a qualified archaeologist to arrange a schedule for monitoring the project site during grading and excavation activities. If archaeological resources or human remains are discovered during construction, work shall be halted and the area shall be staked off. The project developer shall notify a qualified professional archaeologist. If human remains are found during construction there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of Santa Clara County is contacted to determine that no investigation of the cause of death is required.	**Less Than Significant**
Geology	**Seismic Hazards.** The proposed project exposes people or structures to a small risk of potential substantial adverse effects involving seismic hazards.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Hydrology	**Flood Flows in Uvas Creek.** Storm water run-off from impervious surfaces could increase the rate of storm water discharge into Uvas Creek and the Pajaro River drainage.	**Less Than Significant**	N/A	None Required	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Hydrology	**On-Site Flooding.** The proposed commercial area and portions of the proposed residential area are within 100-year flood zones as identified on the FEMA maps. The Gilroy Floodplain Control Ordinance allows development within 100-year floodplains provided certain measures are taken to prevent potential damage from flooding. Portions of the commercial area are within a 25-year flood zone based on a hydrology study conducted for the sports park. Development within these areas prone to flooding presents potential risks to health and safety of people and damage to buildings and property.	**Potentially Significant**	13	A hydrology report shall be prepared to address the following requirements: • Site plans and building designs shall comply with the City of Gilroy Flood Plain Control Ordinance. • Development on the project site shall not impede the flow of floodwaters. • Procedures shall be developed and site plans designed that will assure that any materials, supplies or goods used, stored or hold for sale at the proposed use that may present health hazards or risks of water contamination during flood conditions are securely kept at least one foot above the 100-year flood level. • Development on the project site shall not result in an increase in floodwater levels off the project site.	**Less Than Significant** **or** **Unavoidable Significant**
Hydrology	**Secondary Impact–Off-Site Flooding.** Mitigation required for construction within the floodplain could potentially result in diversion of floodwaters and increases in flood levels off the project site.	**Potentially Significant**	13	See Above.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Hydrology	**Flood Flowage Easement.** SCVWD holds a flood flowage easement that restricts land use and development on a large portion of the project site. Inappropriate development within this easement could put structures at risk of damage and people at risk of injury or death from storm-related flooding.	**Potentially Significant**	13	See Above.	**Less Than Significant**
Hydrology	**Surface Water Quality During Construction.** Grading will expose sediments to rain or wind erosion and subsequent transportation of sediments to Uvas Creek. Materials used and wastes generated during construction would degrade water quality also. Non-point source pollutants from urban activity at the project site would be released	**Significant**	14 15	The City shall submit a Notice of Intent and detailed engineering designs to the Central Coast Regional Water Quality Control Board, and implement a Storm Water Pollution Prevention Plan that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site. The City shall submit plans for review by, and obtain an approved permit from the Santa Clara Valley Water District.	**Less than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Hydrology	**Surface Water Quality During Operation.** Contaminants common to urban area storm water and irrigation run-off could potentially result in the pollution of Uvas Creek and the Pajaro River. These contaminants could be transported to the drainage system, polluting downstream water systems.		16	A sedimentation basin shall be included in plans. Additional "best practices" operational measures may be required for specific projects.	**Less Than Significant**
Noise	**Long-Term and Short-term Noise from Sports Park Activities.** Athletic events and traffic entering and exiting the project site would generate long-term noise at the proposed residential area north of the sports park. Spectator shouting and public address system announcements, would generate short-term, annoyance noise at the residential area.	**Unavoidable Significant**	N/A	To reduce the long-term noise to a less than significant level, a six-foot tall acoustically effective barrier would be required along the northern boundary of the sports park site. The location of the barrier is partly within the SCVWD flood flowage easement. Placement of the barrier would potentially impede the flow of floodwaters and could result in increased flooding impacts in other areas.	**Unavoidable Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Noise	**Exterior Traffic Noise at Residential Areas along Monterey Street.** At General Plan build-out, noise levels from traffic on Monterey Street would exceed City standards at adjacent proposed residential areas.	**Unavoidable Significant**	N/A	This portion of the project site is located within a flood zone, and a sound attenuation barrier would not be feasible if the barrier were to interfere with flood flows or affect off-site flood levels. Additionally, a noise barrier would place a visually obtrusive element along southern Monterey Street, a principal gateway designated in the *Draft Gilroy 1999-2020 General Plan*. This would result in a secondary visual impact.	**Unavoidable Significant**
Noise	**Exterior Traffic Noise at Residential Areas along West Luchessa Avenue.** At General Plan build-out, noise levels from traffic on West Luchessa Avenue would exceed City standards at the proposed residential areas adjacent to that street.	**Unavoidable Significant**	17	A sound attenuation barrier eight feet in height shall be constructed along West Luchessa Avenue.	**Unavoidable Significant**
Noise	**Interior Noise Levels at Residential Areas.** Traffic and sports park noise at the proposed residential area would exceed 45 dBA.	**Potentially Significant**	18	An acoustical study shall establish engineering requirements to be included in construction plans to maintain interior noise levels at no greater than 45 dBA_{DNL}.	**Less Than Significant**
Noise	**Short-term Construction Noise.** Construction activities at the project site could result in high levels of noise.	**Significant**	19	Construction activities shall be limited to specified hours.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Fire Protection Services	**Fire Services** The proposed project does not result in the need for additional facilities for the provision of fire protective services, and would not decrease the level of these services provided to any part of the community.	**No Impact**	N/A	None Required	**No Impact**
Police Protection Services	**Police Services.** The proposed project does not result in the need for additional facilities for the provision of police services, and would not decrease the level of these services provided to any part of the community.	**Less Than Significant**	N/A	None Required	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Schools	**Student Enrollment Exceeding Capacity** The proposed project would add approximately 120 students to the GUSD. Enrollment is currently over capacity at the District's elementary schools and high school. However, since some students drop out each year, actual attendance is close to capacity. The District is constructing a new elementary school and has plans to construct a new middle school. In addition, grade level re-distribution among schools will bring kindergarten through 8th grade enrollment close to capacity for each of those grade levels.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Water Supply	**Construction of Potable Water and Recycled Water Infrastructure.** The proposed project does not require substantial extensions or upgrades to the existing potable or recycled water supply infrastructure. Existing or planned lines within adjacent street right-of-ways would serve the proposed project.	**Less Than Significant**	N/A	None Required	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Water Supply	**City Water Supply.** The proposed project would result in an incremental increase in demand for potable water that is within the City of Gilroy's ability to provide.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Water Supply	**Groundwater Supply.** The proposed project would result in an overall decrease in water use. Less groundwater would be required from the Llagas Groundwater Sub Basin to supply the project site.	**Beneficial**	N/A	None Required	**Beneficial**
Waste water	**Construction of Wastewater Infrastructure.** The proposed project does not require substantial extensions or upgrades to the existing wastewater infrastructure. Existing or planned lines within adjacent street right-of-ways would serve the proposed project.	**Less Than Significant**	N/A	None Required	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Transportation Circulation	**West Luchessa Avenue/Princevalle Street.** Traffic impacts at this intersection would improve to acceptable levels with signalization that is already included in the City's Capital Improvement Budget, and is programmed for implementation in 2001 or 2002.	**Less Than Significant**	N/A	None Required	**Less Than Significant**
Transportation Circulation	**West Luchessa Avenue/Church Street.** The addition of project traffic to the West Luchessa Avenue/Church Street intersection would cause both overall intersection operations and the worst approach to deteriorate from acceptable operating levels to LOS F during both the PM and Saturday peak hours.	**Significant**	20	The following street improvements shall be made to the intersection of West Luchessa Avenue and Church Street: • installation of a traffic signal with two-phase operation; • re-configuration of the northbound and southbound approaches as necessary to provide one approach lane for all movements; • provision of one left-turn lane and one shared through and right-turn lane on the eastbound and westbound approaches.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Transportation Circulation	**Monterey Street/Luchessa Avenue.** The intersection of Monterey Street and Luchessa Avenue is projected to degrade from LOS C to LOS F during the PM peak hour with the addition of project-generated traffic.	**Significant**	21	The following street improvements shall be made to the intersection of Monterey Street and Luchessa Avenue: • construction of a second northbound left-turn lane and an exclusive eastbound right-turn lane; • addition of a right-turn arrow for the eastbound right-turn movement (so vehicles in this movement could move while the northbound left-turn movement has a green arrow).	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Transportation Circulation	**Monterey Street/Monterey Frontage Road.** The operation of the Monterey Street/Monterey Frontage Road intersection is projected to deteriorate from acceptable level under Background Conditions to LOS F during the PM and Saturday peak hours with the addition of project traffic and construction of the proposed traffic signal.	**Significant**	22	Following or in conjunction with the signalization of the intersection of Monterey Street and Monterey Frontage Road, the following street improvements shall be made: • re-configuration of the southbound approach as necessary to provide one left-turn lane, two through lanes, two right-turn lanes; • re-configuration of the westbound approach as necessary to provide one shared lane for all movements; • re-configuration of the northbound approach as necessary to two left-turn lanes, one through lane, one shared through/right- turn lane; • re-configuration of the eastbound approach as necessary to provide one exclusive left-turn lane, one shared through and left-turn lane, and one right-turn lane. • right-turn arrows shall be provided for the eastbound and southbound right-turn movements to provide LOS C intersection operations during all three study periods. This lane configuration will require split phase operation of the eastbound and westbound approaches.	**Less Than Significant**

Area of Concern	Impact	Level of Significance	Mitigation Number	Mitigation Measure	Residual Impact
Transportation Circulation	**West Luchessa Avenue Roadway Segment.** With the addition of project-generated traffic, this key roadway segments is projected to deteriorate to an unacceptable level of service.	**Significant**	23 24	A right-of-way sufficient for a six-lane arterial shall be dedicated to the City of Gilroy along the West Luchessa Avenue frontage of the project site. West Luchessa Avenue shall be widened to four lanes between Monterey Street and Princevalle Street.	**Less Than Significant**
Transportation Circulation	**U.S. Highway 101.** The proposed project is estimated to add traffic that will exceed one percent of the capacity to all four of the nearby freeway segments. All of the segments are projected to operate at LOS B or C during the PM peak hour, acceptable levels of service.	**Less Than Significant**	N/A	None Required	**Less Than Significant**

Note: Impacts and Mitigation Measures are summarized in this table. Refer to the text of the Environmental Impact Report for the complete text of the impacts and mitigation measures associated with each area of concern.

Source: EMC Planning Group Inc.

1.0 Introduction

1.1 Authorization and Purpose

The City of Gilroy certified the *Gilroy Sports Park and Urban Service Area Amendment Environmental Impact Report* (SCH#1998102079) on June 7, 1999. That environmental impact report (EIR) evaluated the addition of 140.21 acres of land south of Gilroy into the City's Urban Service Area (USA), construction of a sports park on a 78.36-acre portion of the USA amendment area and construction of off-site improvements related to the sports park. Based on that EIR the *Gilroy Sports Park Master Plan* was approved by the City of Gilroy on June 7, 1999. The Gilroy City Council approved the USA amendment request on June 7, 1999 and staff was directed to submit the application to Santa Clara County Local Agency Formation Commission. The certified EIR is available for review by contacting Bryan Stice at the City of Gilroy Planning Division, 7351 Rosanna Street, Gilroy, California 95020 or (408) 846-0440.

The certified EIR was prepared using the existing general plan land use designations for the project site. The project site included some areas not proposed for development at the time the certified EIR was prepared. The City of Gilroy is in the process of adopting an updated general plan. The *Draft Gilroy 1999-2020 General Plan* includes changes in the land use designation for some of the parcels included in the USA amendment request. These parcels were evaluated in the certified EIR with an OPEN SPACE designation but are designated RESIDENTIAL NEIGHBORHOOD DISTRICT and COMMERCIAL – GENERAL SERVICES in the *Draft Gilroy 1999-2020 General Plan*. The City of Gilroy applied to the Santa Clara County Local Agency Formation Commission (LAFCo) for the addition of the project site to the City's USA. Because of the probable upcoming changes to the general plan land use designations for the project site, LAFCo required further environmental analysis based on the expected new designations.

CEQA Guidelines section 15162 requires that a subsequent EIR (SEIR) be prepared when an EIR has been certified, if " substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects."

This SEIR has been prepared because the expected changes in the general plan land use designations constitute a significant change in the project description and may result in new or more severe significant environmental impacts that were not identified in the certified EIR.

This SEIR has been prepared by EMC Planning Group Inc. (hereinafter "consultant") under contract to the City of Gilroy as the lead agency in accordance with the *California Environmental Quality Act* (CEQA) and implementing guidelines. This SEIR has been prepared using available information from private and public sources noted herein, as well as information generated by the consultant through field investigation. This SEIR will be used to inform public decision-makers and their constituents of the environmental impacts of the proposed project. In accordance with CEQA guidelines, this report describes both beneficial and adverse impacts generated by the proposed project and suggests measures for mitigating significant adverse environmental impacts resulting from the proposed project.

Based upon the decision to prepare a SEIR, the City prepared and distributed a notice of preparation (NOP), in accordance with CEQA Guidelines section 15082. CEQA Guidelines section 15375 defines an NOP as "...a brief notice sent by the lead agency to notify the responsible agencies, trustee agencies, and involved federal agencies that the lead agency plans to prepare an EIR for the project. The purpose of the notice is to solicit guidance from those agencies as to the scope and content of the environmental information to be included in the EIR."

The NOP and responses to the NOP are contained in Appendix A.

This SEIR describes and evaluates the existing environmental setting of the project site and surrounding areas, discusses the characteristics of the proposed project, identifies environmental impacts associated with the proposed project, and provides feasible mitigation measures that can be implemented to reduce or avoid identified adverse environmental impacts. This SEIR also evaluates reasonable alternatives to the proposed project.

Where an EIR identifies a significant adverse impact, the lead agency may not approve the project unless it finds that changes to the project or mitigation measures have been required of the project to reduce the impact's significance or that changes are infeasible for specified social, economic, and/or other reasons (Public Resources Code section 21081).

When a mitigation measure is associated with a project impact that is identified as significant in the EIR, the lead agency may not exclude the mitigation measure from the project conditions without making specific findings regarding the omission.

This SEIR is a factual, objective public disclosure document that takes no position on the merits of the proposed project. Thus, the findings of this SEIR do not advocate a position "for" or "against" the proposed project. Instead, this SEIR provides information on which decisions about the proposed project can be based.

This SEIR has been prepared according to the professional standards and practices of the EIR participants' individual disciplines and in conformance with the legal requirements and informational expectations of CEQA and its implementing guidelines.

1.2 Project Background and History

To address a lack of sports facilities for City residents, the City of Gilroy proposed the construction of a sports park on land immediately south of the City. The proposed project included the construction of the sports park and related off-site improvements and a USA amendment request for the 78.36-acre sports park site and 61.85 acres of surrounding land. The surrounding land was included in the USA amendment to make the amendment area more contiguous to the existing USA. The sports park site alone was connected to the existing USA by a 100-foot wide driveway. The City of Gilroy certified the EIR for the sports park and USA amendment and approved the sports park master plan on June 7, 1999. A USA amendment request was submitted to the Santa Clara County LAFCo on June 23, 1999.

Santa Clara County LAFCo requested additional environmental review of the USA amendment request based on proposed new land use designations in the *Draft Gilroy 1999-2020 General Plan*. The parcels that were a part of the USA amendment request but not proposed for sports park development were analyzed in the certified EIR based on the existing *Gilroy General Plan* designation of OPEN SPACE. The *Draft Gilroy 1999-2020 General Plan* designates 27.72 acres of this area as RESIDENTIAL – NEIGHBORHOOD DISTRICT and the remaining 27.13 acres of this area as COMMERCIAL – GENERAL SERVICES. This SEIR addresses the anticipated change in general plan designation for these parcels. As of the release of this Draft SEIR for public review, the *Draft Gilroy 1999-2020 General Plan* has yet to be adopted.

The City of Gilroy owns the sports park site and approved the master plan for the sports park's development. Although the sports park site is located in unincorporated Santa Clara County, outside the City's corporate limits and USA, the City of Gilroy may proceed with development of the sports park without the approval of the County of Santa Clara or Santa Clara County LAFCo. As a city, Gilroy is exempt from the permit authority of other agencies on land that the City owns (40 Ops.Cal.Atty.Gen243 (1962) and Government Code sections 53090 and 53091).

Development of the sports park is an approved project and therefore is not part of the proposed project for this SEIR. The environmental impacts of the sports park were adequately addressed in the certified EIR and no new analysis is required. The sports park site's inclusion in the USA is a part of the proposed project. This SEIR focuses on the USA amendment request, including the sports park site, under the

proposed *Draft Gilroy 1999-2020 General Plan* land use designations, and the subsequent build-out of the residential and commercial parcels. This SEIR considers impacts of the approved sports park as a part of cumulative impacts.

1.3 Project Location and Existing Conditions

Project Location and Vicinity

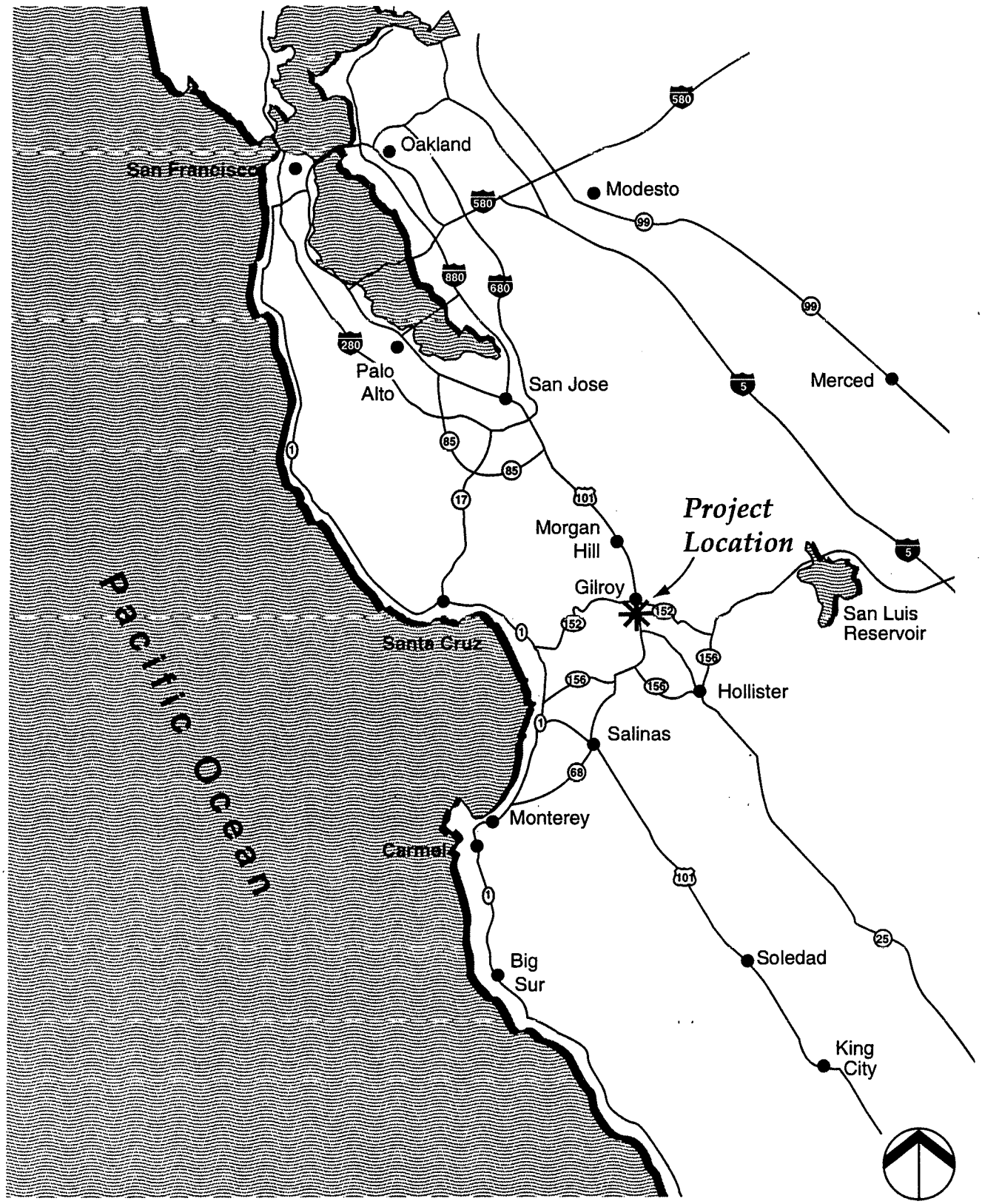
The project site is located immediately south of the City of Gilroy in unincorporated Santa Clara County, approximately 35 miles south of San Jose, 10 miles south of Morgan Hill, and 30 miles northeast of Salinas. Figure 1 illustrates the regional location.

The project site is located at the southwest corner of Monterey Street and West Luchessa Avenue. It is bordered by West Luchessa Avenue to the north, Uvas Creek and Farman Lane to the south, Monterey Street and Monterey Frontage Road to the east, and Uvas Creek to the west. Surrounding land uses are residential (single-family), commercial (hotels, mini-storage, automobile sales, restaurants), and agricultural (row crops, greenhouses). U.S. Highway 101 is located to the east of the project site, approximately 300 feet from the south end of the project site and approximately 1,100 feet from the north end of the project site. Figure 2 illustrates the project vicinity. Figure 3 illustrates existing land uses in the project site and vicinity. An aerial view of the project site and vicinity is presented in Figure 4.

Planning Designations

The project site currently under the jurisdiction of Santa Clara County. The *Santa Clara County General Plan* land use designation for the project site is OPEN SPACE RESERVE. This designation is used for land that is adjacent to an existing USA but for which no long-term use has been determined.

The project site is within the City of Gilroy 20-year planning area. The project site has been in the 20-year planning area since the current general plan was adopted in 1979. The current *Gilroy General Plan* land uses for the project site are OPEN SPACE and PARK/PUBLIC FACILITY. Current general plan land use designations are illustrated in Figure 5. Gilroy's general plan is in the process of being updated. The *Draft Gilroy 1999-2020 General Plan* land use designations for the project site are RESIDENTIAL – NEIGHBORHOOD DISTRICT, COMMERCIAL – GENERAL SERVICES and PARK/RECREATION FACILITY. Proposed general plan land use designations are illustrated in Figure 6. The existing Gilroy USA is illustrated in Figure 7.



Source: California State Automobile Association and EMC Planning Group Inc.

Not to Scale

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy USA Amendment 98-03 Subsequent EIR

Regional Location

Figure **1**

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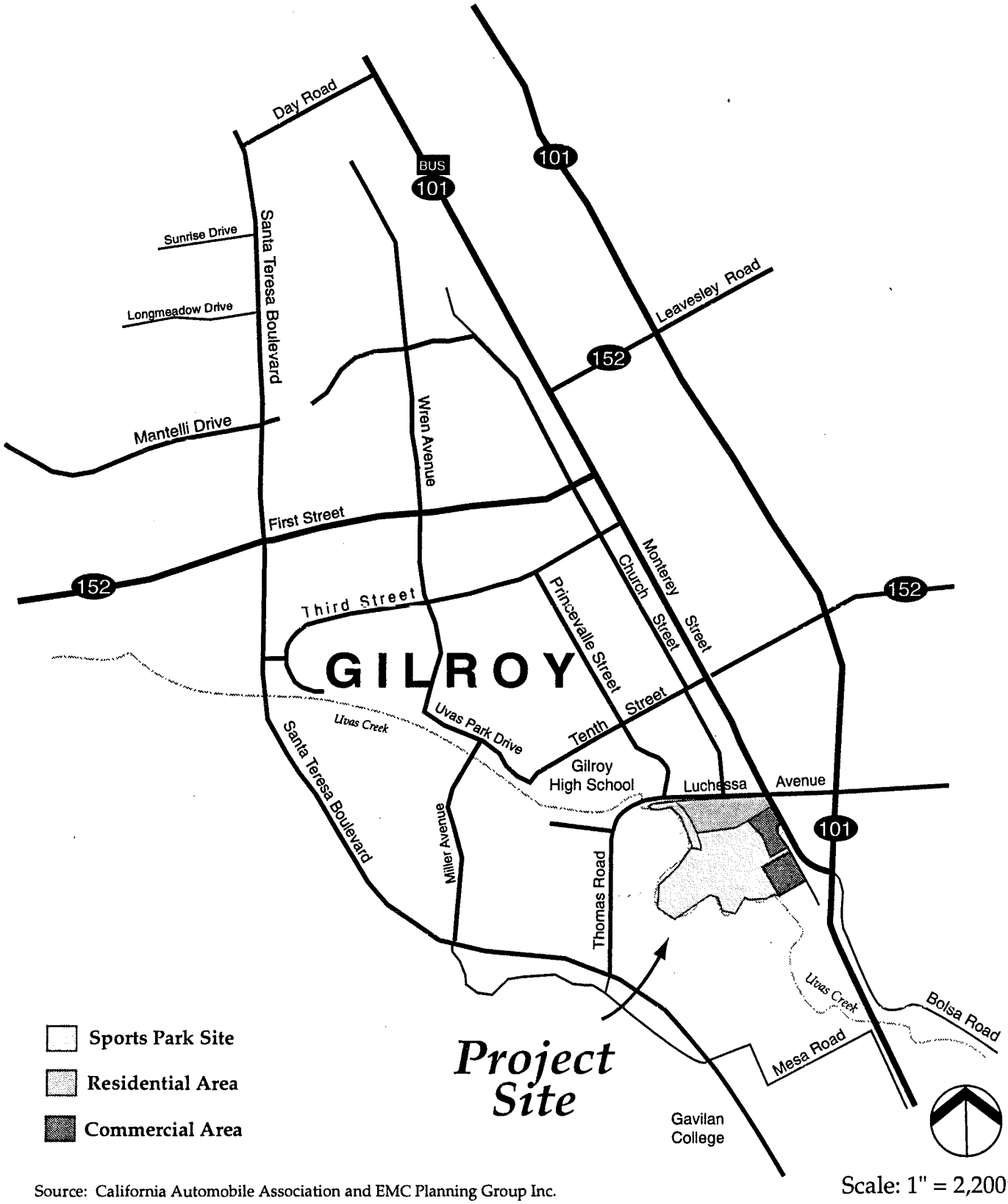

Source: California Automobile Association and EMC Planning Group Inc.

Scale: 1" = 2,200'

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Project Vicinity

Figure 2

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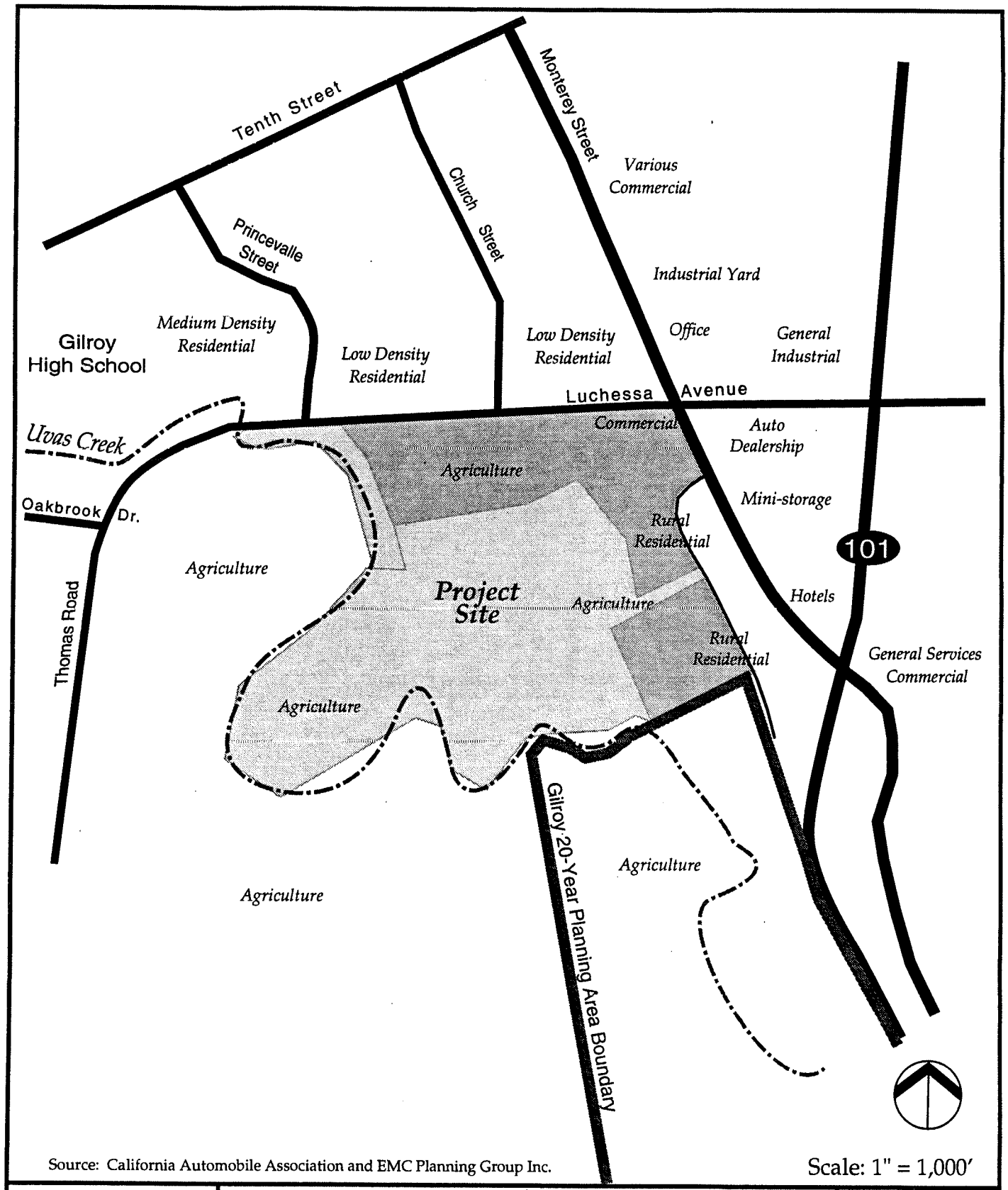

Source: California Automobile Association and EMC Planning Group Inc.

Scale: 1" = 1,000'

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Gilroy USA 98-03 Amendment Subsequent EIR

Existing Land Uses

Figure 3

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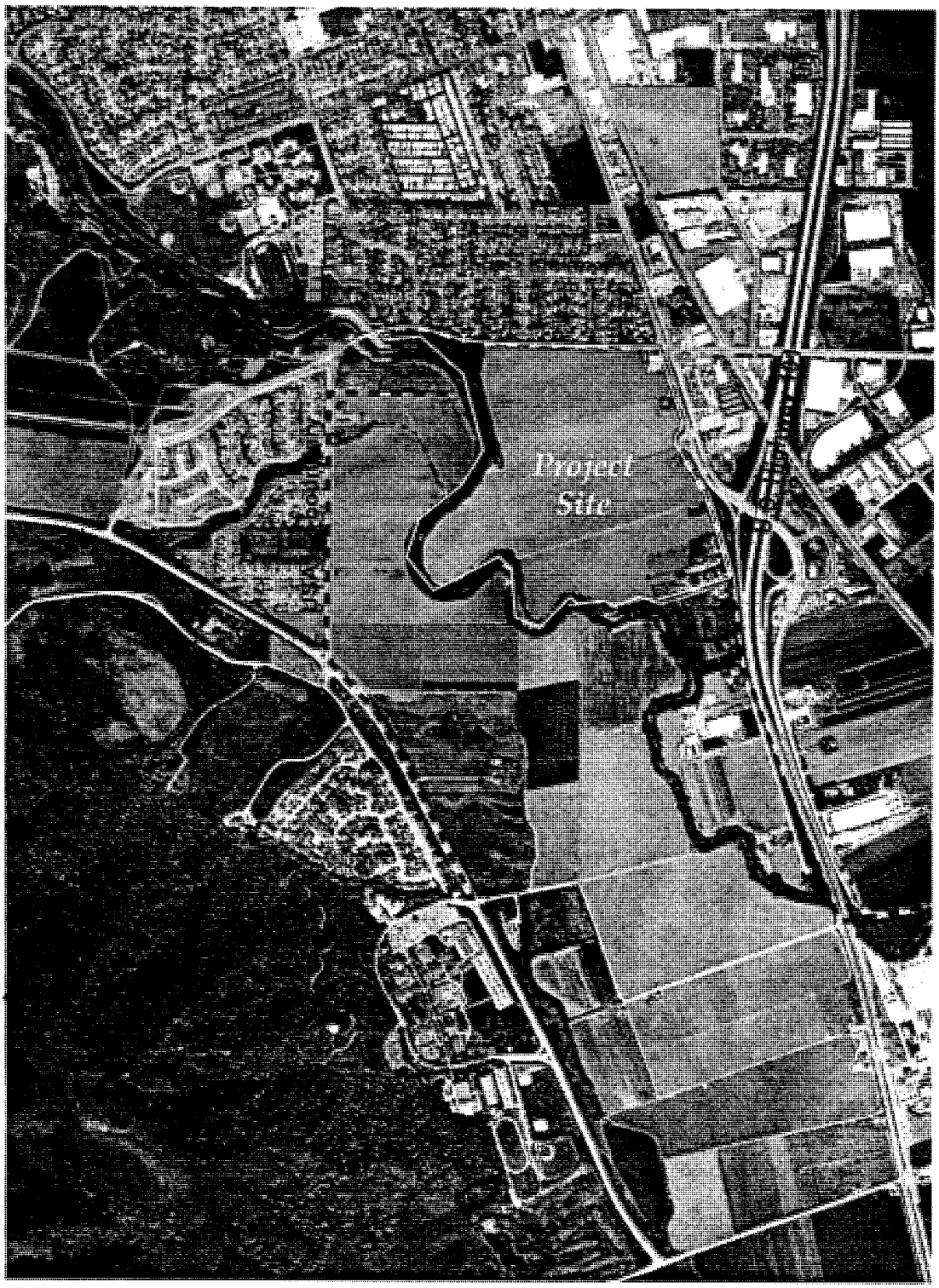

Source: WAC Corporation and EMC Planning Group Inc.

Scale: 1" =1,500'

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Gilroy USA Amendment 98-03 Subsequent EIR

Aerial Photograph

Figure 4

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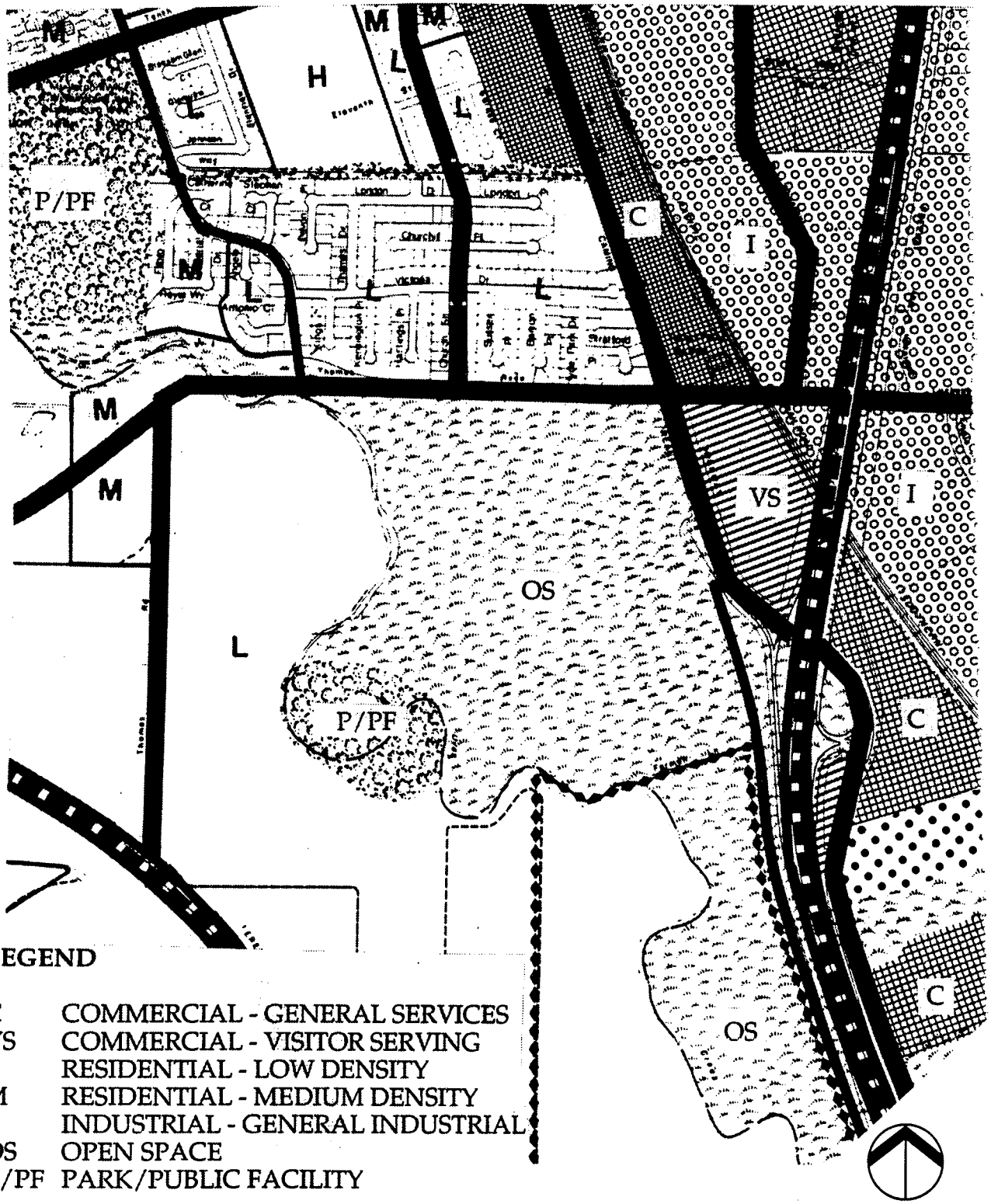

Source: City of Gilroy

Scale: 1" = 1,000'

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Gilroy USA Amendment 98-03 Subsequent EIR

Current General Plan Land Use Designations

Figure 5

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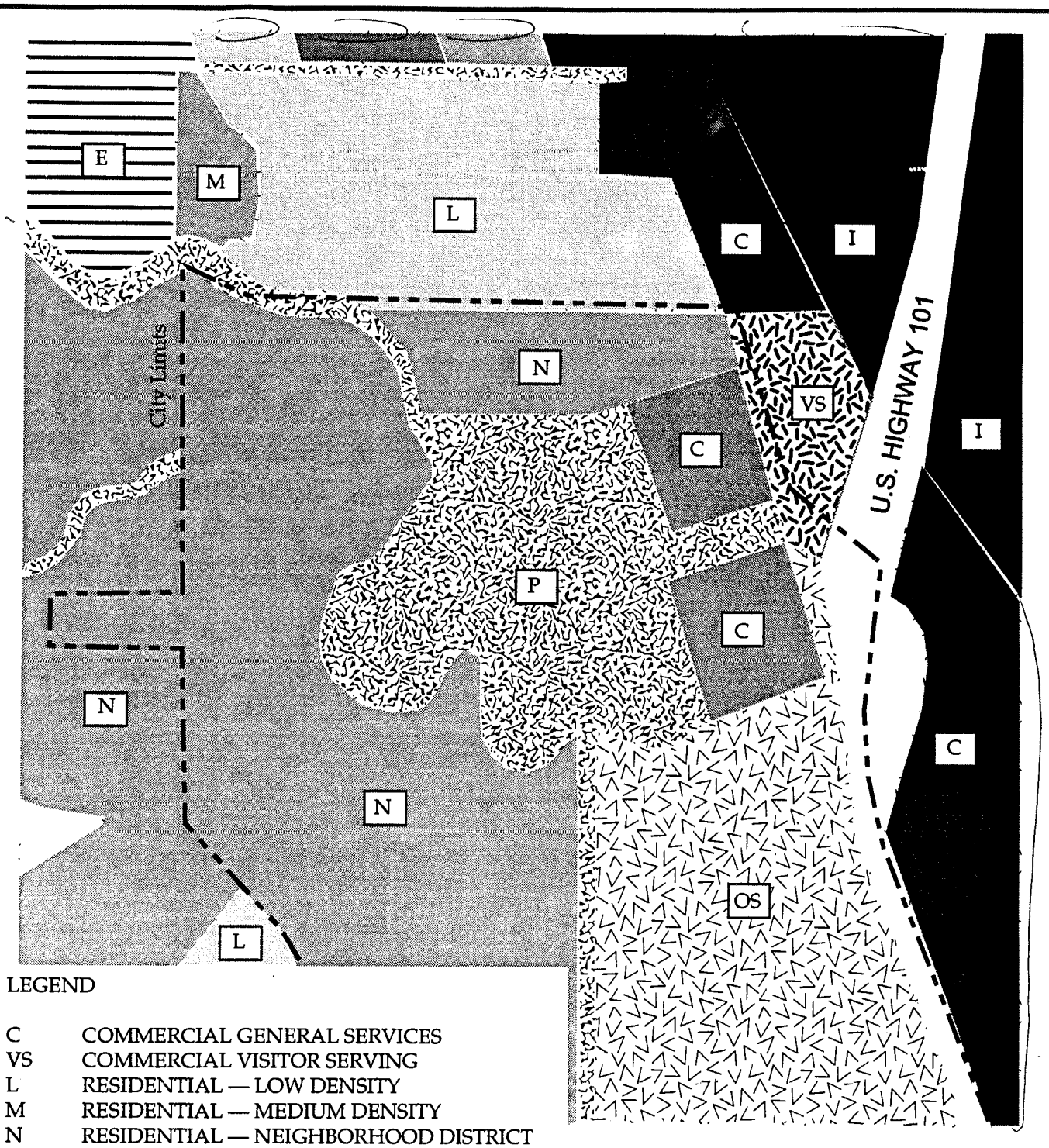

LEGEND

C	COMMERCIAL GENERAL SERVICES
VS	COMMERCIAL VISITOR SERVING
L	RESIDENTIAL — LOW DENSITY
M	RESIDENTIAL — MEDIUM DENSITY
N	RESIDENTIAL — NEIGHBORHOOD DISTRICT
I	GENERAL INDUSTRIAL
E	EDUCATIONAL FACILITY
P	PARK/RECREATION FACILITY
OS	OPEN SPACE

Source: City of Gilroy

Scale: 1" = 1,000'

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Gilroy USA Amendment 98-03 Subsequent EIR

Proposed General Plan Land Use Designations

Figure 6

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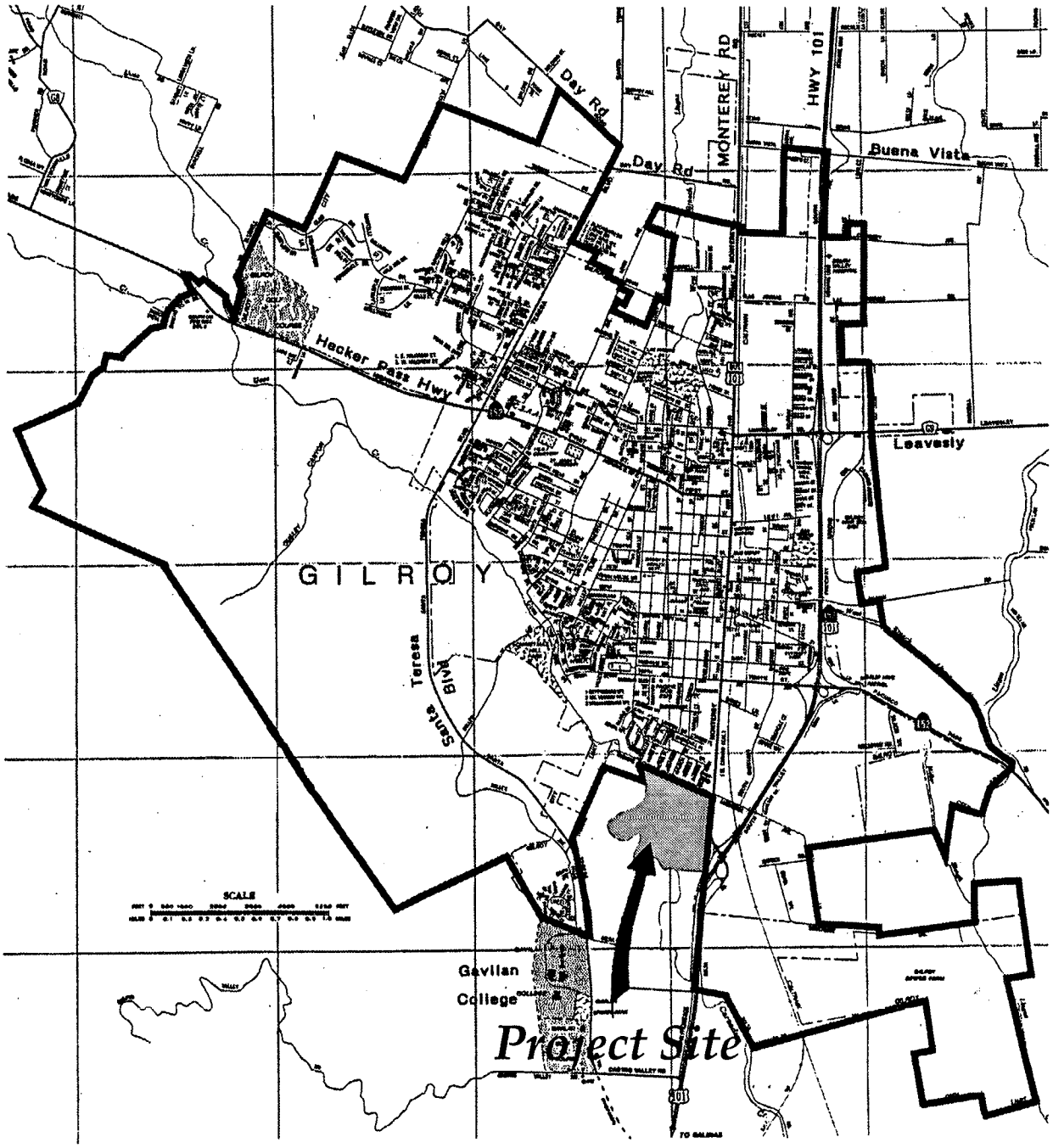

Source: City of Gilroy

Scale: 1" = 4,200'

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Existing Urban Service Area

Figure 7

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Existing Project Site Conditions

The project site is currently in agricultural row-crop production. Four rural residential complexes, with houses and various outbuildings are located along the site's eastern boundary on Monterey Street and Monterey Frontage Road. A propane gas facility is located at the corner of Monterey Street and West Luchessa Avenue. With build-out of the proposed project the residences, outbuildings and propane gas facility would be removed. Uvas Creek forms the western boundary and a portion of the southern boundary of the project site. An earthen flood-control levee was constructed on a portion of the site. It extends from a point approximately 1,100 feet (on-site) south of West Luchessa Avenue to 4,500 feet upstream (and off-site) to Miller Avenue. Approximately 1,800 feet of the levee is on the project site. The levee is set back from the top of the natural creek bank by approximately 50 feet. Photographs of existing conditions at the project site are presented in Figure 8.

Approved Project Site Improvements

The City of Gilroy has approved a master plan for the development of a 78.36-acre sports park for the southwest portion of the project site. The development of the Gilroy Sports Park and construction of off-site improvements were approved by the City of Gilroy when they approved the *Gilroy Sports Complex Final Master Plan.* The sports park site is currently in agricultural production and contains no structures. The sports park and related improvements will be constructed over an approximate 20-year time frame. The final sports park site plan is shown in Figure 9.

The *Gilroy Sports Complex Final Master Plan,* prepared by The Beals Group, Inc. in April 1999, is available for public review at the City of Gilroy Community Services Department. Sports park components will include the following: recreational play fields (eight softball diamonds and four soccer fields and concession/restrooms); premier play fields (one 90-foot baseball diamond, two little leagues diamonds and one soccer field and concession/restrooms); competition play fields (one softball/baseball diamond and one soccer field and concession/restrooms); 8.8 acres of park preserve with volleyball, family picnic, concessions/restrooms, bocci ball courts, and play area; commercial recreation (indoor soccer, roller hockey, community building, storage); corporation yard; parking (1,043 spaces); and a night watch park ranger station. Soccer fields overlay baseball/softball fields. Football may also be played on the soccer fields.

The master plan also includes the following: a minimum 50-foot habitat buffer zone, measured from 50 feet from top of bank, along Uvas Creek to be enhanced with native plantings; a six-foot perimeter fence; walking/bicycle paths throughout the site including a portion of the extension of the Uvas Creek Trail; entry gates and an entry building at the Monterey Frontage entrance.

The sports park will be developed in approximately nine phases over an approximate 20-year time frame. Construction will begin near the entrance and continue to the west end of the site for Phases One through Seven. Phases Eight through Nine can be developed at any time independently of the other phases.

The sports park was part of the proposed project studied in the certified EIR. No changes are proposed for the development of the approved sports park. Sports park-specific environmental impacts were adequately addressed in the certified EIR and no new analysis of the sports park is presented. The sports park is analyzed in this SEIR only as it contributes to cumulative impacts.

Approved Off-Site Improvements

Off-site improvements included in the approved *Gilroy Sports Complex Final Master Plan* include the extension of the Uvas Creek Trail north to West Luchessa Avenue, and south to Gavilan College; extension of the city's recycled water distribution line to the sports park; and roadway improvements. The off-site improvements included in the approved *Gilroy Sports Complex Final Master Plan* were part of the proposed project studied in the certified EIR. No changes are proposed for the development of these approved off-site improvements. The environmental impacts of these approved improvements were adequately addressed in the certified EIR and no new analysis is presented. These approved off-site improvements are analyzed in this SEIR only as they contribute to overall project impacts and cumulative impacts.

Uvas Creek Trail Extension

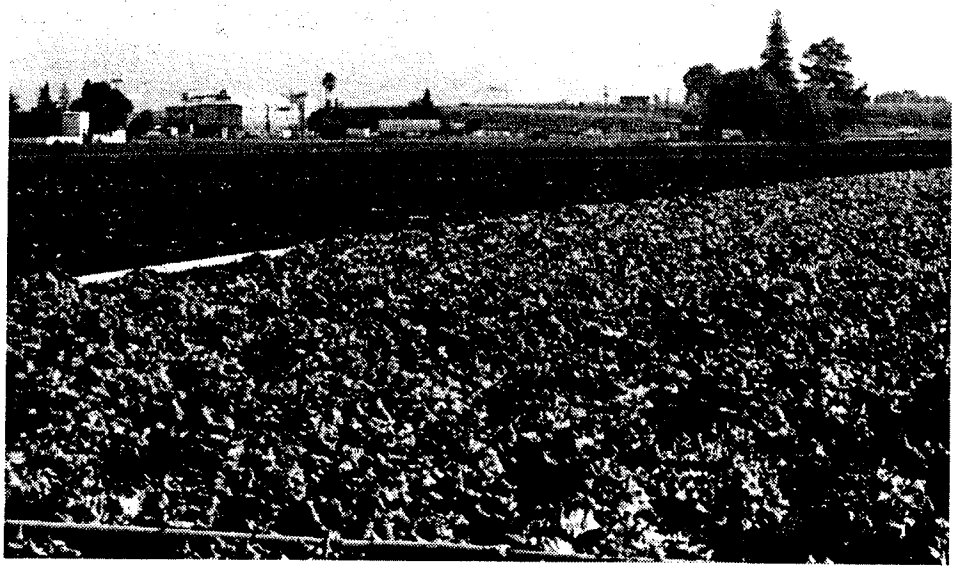
The project's trail system will connect to the existing Uvas levee trail, which ends just past West Luchessa Avenue, and to a southward extension to the Gavilan College area. A bridge crossing is planned at the central, southern portion of the project site. The trail then continues south to Mesa Road and east into the Gavilan College campus. The trail connection to the north of the sports park site is located on a 7.00-acre parcel that is included in the USA amendment request.

Recycled Water Distribution Line

The city will extend a recycled water distribution line to serve the landscape and field irrigation needs of the sports park.

Roadway Improvements

The intersection of Monterey Street and Monterey Frontage Road will be signalized and a crosswalk installed. A six-foot wide sidewalk will be constructed southward from the West Luchessa Avenue/Monterey Street intersection to the Monterey Frontage Road with sports park signs. The sidewalk will continue down Monterey Frontage Road and into the sports park, with a parkway strip consisting of shade trees and accent planting.



The view east from Uvas Creek near West Luchessa Avenue.



Looking north from southern edge of project site.

Source: EMC Planning Group Inc.

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy USA Amendment 98-03 Subsequent EIR

Site Photos

Figure 8

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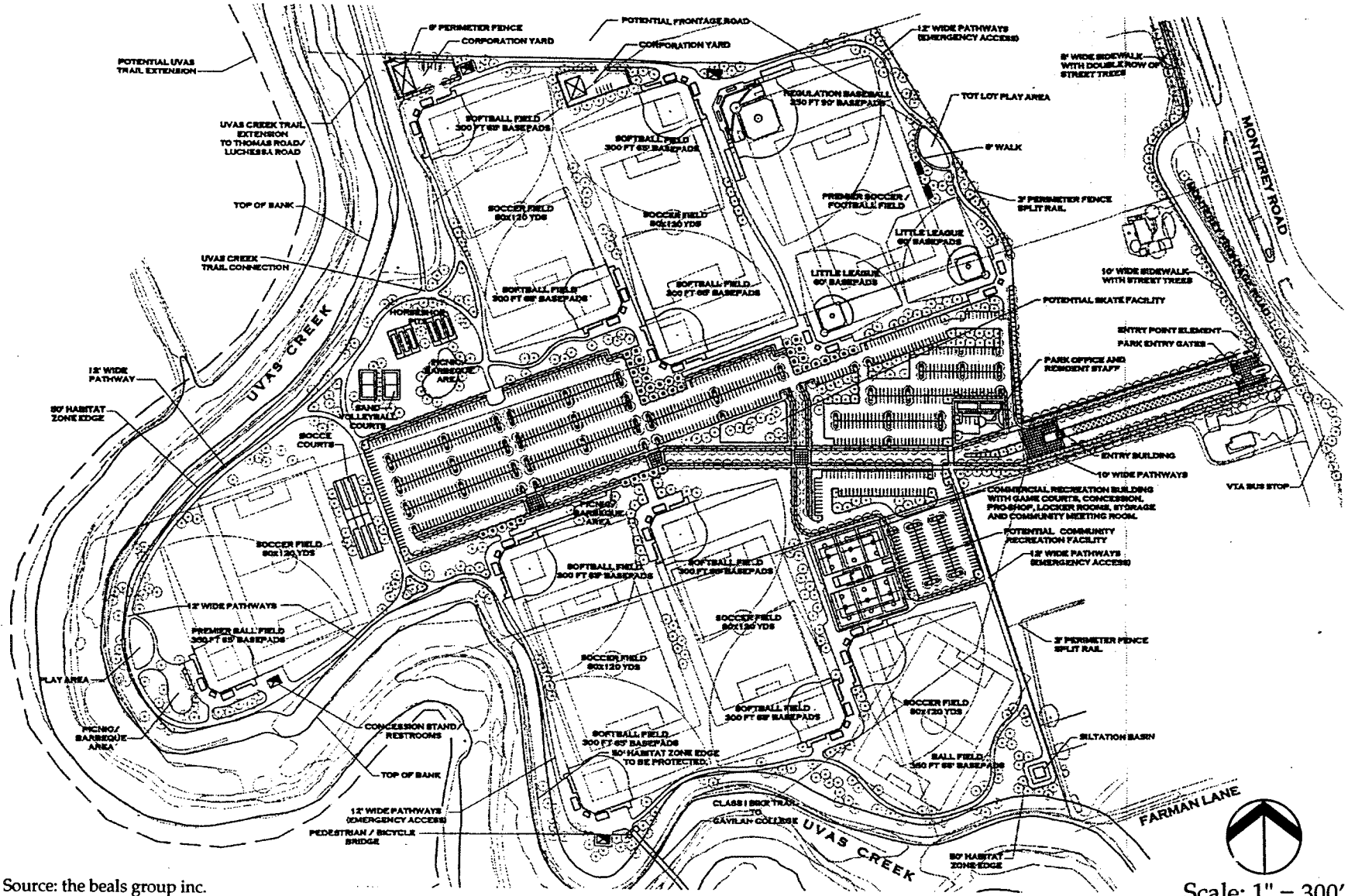

Source: the beals group inc.

Scale: 1" = 300'

EMC Planning Group Inc.

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Gilroy USA Amendment 98-03 Subsequent EIR

Sports Park Master Plan

Figure 9

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1.4 Project Description

The proposed project includes a USA amendment for the entire 140.21-acre project site, which includes the *approved* Gilroy Sports park and habitat buffer on 78.36 acres, an *approved* trail extension and habitat buffer on 7.00 acres, *proposed* residential development on 27.72 acres and *proposed* commercial land uses on 27.13 acres. Table 1 summarizes the probable build-out of the project site.

TABLE 1

Probable Build-out Scenario

Approved Park and Recreation	**Gross Acres**	**Building Coverage**	**Height Requirements**	**Dwelling Units**
Sports Park	78.36	n/a	n/a	n/a
Trail	7.00	n/a	n/a	n/a
Total Approved Uses	**85.36**			
Proposed Residential Land Use[1]	**Gross Acres**			
SFR/Duplex	20.72	n/a	n/a	90
MDR	7.00	n/a	n/a	57
Total Residential	**27.72**	n/a	n/a	**147**
Proposed Commercial Land Use[2]	**Gross Acres**			**Square Footage**
General Services	27.13	25% of Gross	2 stories average	590,238
Total Commercial	**27.13**	**n/a**	**n/a**	**590,238**
Project Total	**140.21**			

1 Based on a conceptual map for residential development currently in the RDO process.

2 Based on a telephone conversation with Bryan Stice. 25% of gross building coverage was used in Gilroy 1999-2020 General Plan EIR.

Source: City of Gilroy

Urban Service Area Amendment Request

The entire 140.21-acre project site is proposed for inclusion into the City' s USA, and annexation to the city. The USA amendment request includes the 78.36-acre sports

park site, 54.85 acres of adjacent land on the east and north and a 7.00-acre parcel containing the flood control levee. The approved sports park site is contiguous with the existing USA for approximately 100 feet where the sports park access road will meet Monterey Frontage Road. A residential development is being planned for the northern portion of the project site. The adjacent parcels to the north and east of the sports park site are included in the USA amendment request because the addition of the sports park parcels alone to the USA would result in an area of the USA connected by only the narrow access road. A map of the USA amendment request and its relationship to the existing USA is included as Figure 10. Assessor's parcels included in the USA amendment request are listed in Table 2.

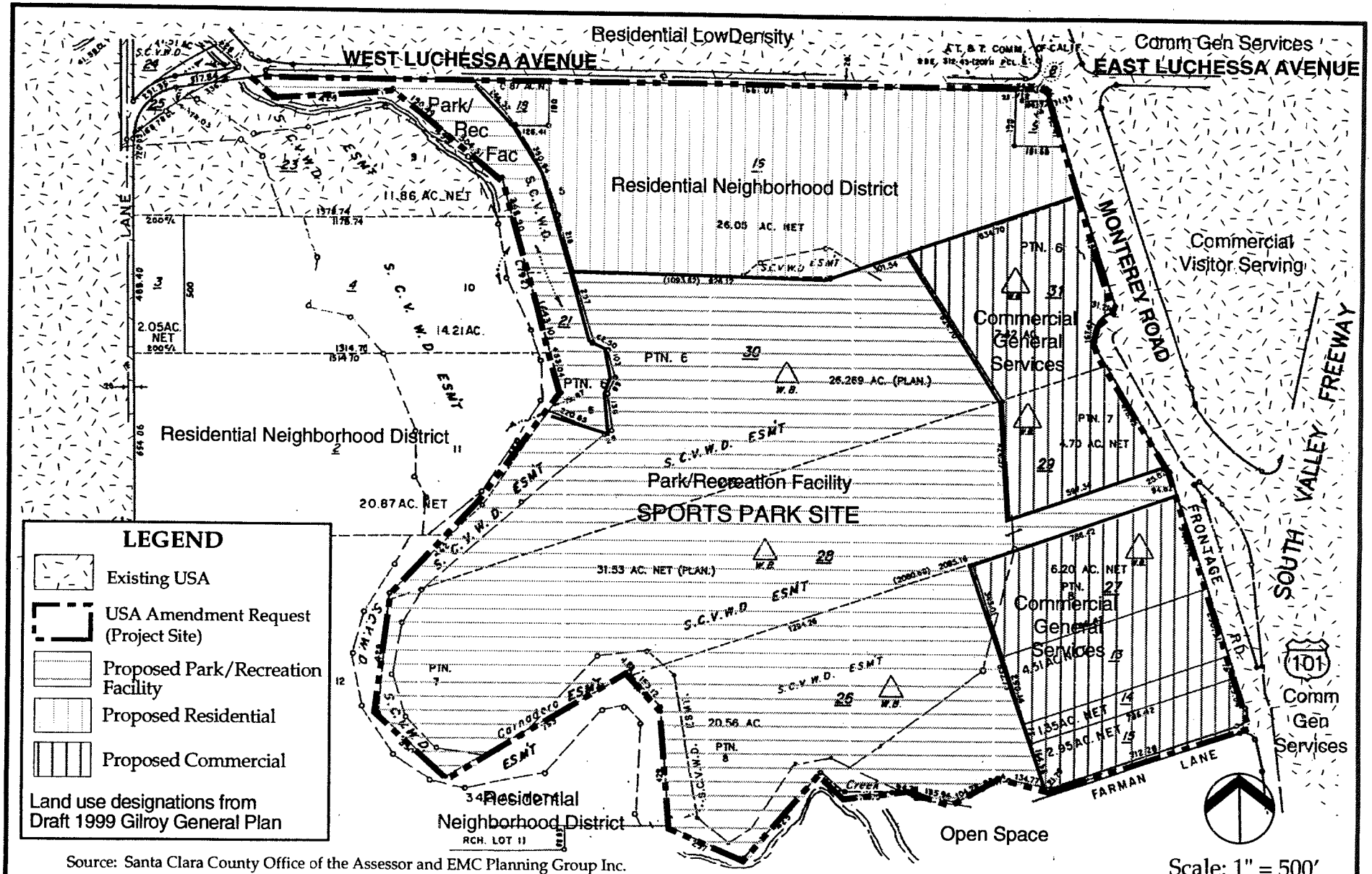
TABLE 2

Assessor's Parcels in USA Amendment Request

Project Component	*Draft Gilroy 1999 General Plan* Land Use Designation	APN	Acres
Approved Sports Park	PARK/RECREATION FACILITY	808-21-026	20.56
	PARK/RECREATION FACILITY	808-21-028	31.53
	PARK/RECREATION FACILITY	808-21-030	26.27
Approved Trail Extension	PARK/RECREATION FACILITY	808-21-021	7.00
Proposed Residential Area	RESIDENTIAL - NEIGHBORHOOD DISTRICT	808-21-008	0.10
	RESIDENTIAL - NEIGHBORHOOD DISTRICT	808-21-009	0.70
	RESIDENTIAL - NEIGHBORHOOD DISTRICT	808-21-016	26.05
	RESIDENTIAL - NEIGHBORHOOD DISTRICT	808-21-018	0.87
Proposed Commercial Area	COMMERCIAL - GENERAL SERVICES	808-21-013	4.51
	COMMERCIAL - GENERAL SERVICES	808-21-014	1.35
	COMMERCIAL - GENERAL SERVICES	808-21-015	2.95
	COMMERCIAL - GENERAL SERVICES	808-21-027	6.20
	COMMERCIAL - GENERAL SERVICES	808-21-029	4.70
	COMMERCIAL - GENERAL SERVICES	808-21-031	7.42
Total			**140.21**

Source: City of Gilroy

The *City of Gilroy General Plan* and *Santa Clara County General Plan* both require that the parcels be annexed to the city prior to any residential or commercial development. The City of Gilroy considers annexation requests when annexation applications are received. Most city annexations qualify for a "city conducted" annexation pursuant to Government Code section 57000 *et seq.*



Source: Santa Clara County Office of the Assessor and EMC Planning Group Inc.

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Gilroy USA Amendment 98-03 Subsequent EIR

Urban Service Area Amendment Request

Figure 10

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Residential Development

The proposed project includes 27.72 acres designated in the *Draft Gilroy 1999-2020 General Plan* as RESIDENTIAL – NEIGHBORHOOD DISTRICT. The residential area would be immediately north of the approved Gilroy Sports Park and the area proposed for COMMERCIAL – GENERAL SERVICES designation along Monterey Street and Monterey Frontage Road. A conceptual plan for development of this area has been submitted to the City of Gilroy and is now in the City's Residential Development Ordinance (RDO) allocation process. A tentative map application can be submitted following approval in the RDO process and annexation of the site to the City. The conceptual site plan is included as Figure 11. The SEIR analyzes the conceptual residential plan as representative of residential development that may occur on the part of the project site proposed for residential use. For the purposes of this SEIR, this conceptual residential development is referred to as the "proposed residential" development.

The conceptual residential site plan shows 147 units of housing on a 26.75-acre site. The proposed residential development would consist of 43 standard-lot (6,000 square feet or greater) single family dwellings, 47 small-lot (less than 6,000 square feet) single family dwellings and 57 units in triplexes on a common lot. The highest density housing is proposed for the eastern end of the residential area and the lowest density housing is proposed for the west end of the residential area nearest Uvas Creek. Lots at the north edge of the proposed residential development would back up to West Luchessa Avenue and front on an internal street. No lots back up to the sports park.

Access to the proposed residential development would be provided off West Luchessa Avenue, with proposed intersections at Church Street and Hyde Park Drive. A connection to Monterey Street shown on the conceptual plan would be restricted to right turns only. A loop street and cul-du-sacs would provide circulation within the proposed residential development. Streets within the proposed residential development would be public. A neighborhood park area of approximately one and one-half acres would be included for use of project residents, accessible from the loop road and the ends of cul-du-sacs. A connection to the approved Uvas Creek Trail extension would be located at the northwest corner of the proposed residential development. Access to the triplex units would be from the loop road with an emergency access onto Monterey Street.

According to the *City of Gilroy Draft Environmental Impact Report for the General Plan 1999-2020,* the California Department of Finance estimates the current average household size in Gilroy is 3.43 persons. The proposed residential development would therefore have a population of approximately 504 people.

Commercial Development

The proposed project includes 27.13 acres designated in the *Draft Gilroy 1999-2020 General Plan* as COMMERCIAL – GENERAL SERVICES. Commercial development would take place on two portions of the project site along Monterey Frontage Road, straddling the sports park entry road. Two parcels totaling 12.12 acres are located north of the sports park entry road and four parcels totaling 15.01 acres are located south of the sports park entry road. No development is currently proposed in the commercial areas.

The proposed general plan designation of COMMERCIAL – GENERAL SERVICES allows buildings up to 55 feet in height, or typically, four stories. The types of commercial uses in this designation tend to have larger market areas and a high volume of customers. Typical examples listed in the general plan update are furniture stores, department stores and supermarkets. The general plan designation also allows commercial industrial uses, which includes glass shops, welding shops and plumbing shops. Automobile sales and service establishments are also allowed, including automobile sales lots, boat or recreational vehicle dealers and body shops. For purposes of this SEIR, the uses at the commercial parcels are anticipated to be retail in nature.

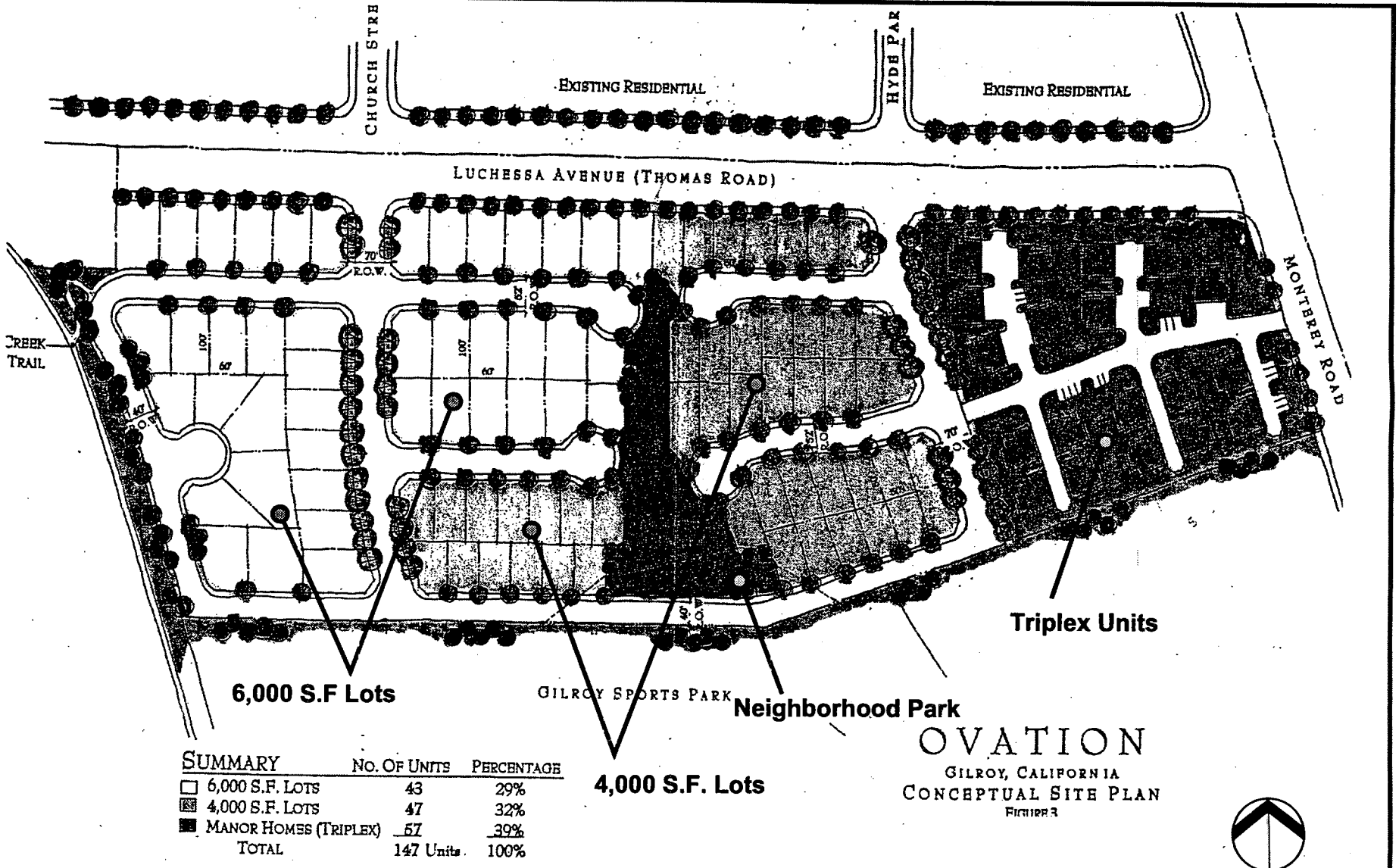
This SEIR evaluates environmental effects of the development of these areas based on a probable maximum build-out scenario. A development scenario for inclusion in this SEIR assumes that the commercial area buildings would have 25 percent lot coverage and average two stories in height. This scenario is consistent with analysis in the EIR for the new general plan and would result in a total of 590,238 square feet of commercial development on the project site. Future specific development proposals for the area may require additional environmental review.

1.5 Project Objectives

The City of Gilroy has approved the Gilroy Sports Park for a site located south of its current city limits and USA. The City desires to include the sports park within its city limits and USA.

The project site is included in the 20-year planning area of the current *Gilroy General Plan*. The City of Gilroy is updating the general plan and expects to designate the project site for residential and commercial development in addition to existing open space and park facility designations. In conjunction with these land use changes, the City would like to bring the project site into the USA. A residential development is in the early planning stages for a portion of the USA amendment request area.

The City of Gilroy wants to avoid a awkwardly-shaped USA that includes a long connecting strip to an isolated USA pocket, or an island of land not in the USA that is surrounded by land that is within the USA. The City has included additional parcels to avoid these potential situations.



SUMMARY	NO. OF UNITS	PERCENTAGE
6,000 S.F. LOTS	43	29%
4,000 S.F. LOTS	47	32%
MANOR HOMES (TRIPLEX)	57	39%
TOTAL	147 Units	100%

Source: Greystone Homes Inc.

Scale: 1" = 200'

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Gilroy USA Amendment 98-03 Subsequent EIR

Conceptual Residential Plan

Figure 11

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1.6 Consistency with Applicable Local and Regional Plans

In accordance with CEQA Guidelines section 15125(d), this section of the EIR evaluates the consistency of the proposed project with applicable local and regional plans. These plans include the current *City of Gilroy General Plan*, the proposed *Draft Gilroy 1999-2020 General Plan* the *City of Gilroy Zoning Ordinance*, the *Santa Clara County General Plan*, applicable LAFCo policies, the *Santa Clara County Congestion Management Plan* and the Bay Area Air Quality Management District (BAAQMD) *Clean Air Plan.*

Current Gilroy General Plan

The *City of Gilroy General Plan* was first adopted by the Gilroy city council on November 5, 1979. The latest revisions were adopted by the Gilroy city council on June 3, 1996. An update to the General Plan is currently under consideration by City decision-makers. This section analyzes those policies of the current *City of Gilroy General Plan* that are relevant to the proposed project. Policies of the *Draft Gilroy 1999-2020 General Plan* are analyzed in the following section. If the *City of Gilroy adopts the Draft Gilroy 1999-2020 General Plan*, its policies will replace those of the current *Gilroy General Plan.*

> ***Urban Growth and Community Design Policy 2a:*** Hazardous areas, such as flood-prone areas and earthquake fault zones, are not suitable for intensive urban development.

Consistency: Portions of the project site are within flood zones. Hydrological issues are discussed in Section 2.7 Hydrology and Flooding. A corner of the area proposed for residential development is located within a 100-year flood zone. Site grading could eliminate potential problems in this area. Most of the area proposed for commercial development is located within a 25-year flood zone, and all of the commercial area is within a 100-year flood zone. Portions of the proposed commercial area are subject to inundation by as much as three and one-half feet of water during 100-year floods. Depending on the hydraulics of the project site, the floor area ratio (FAR) for the commercial development will generally be limited to 25 percent. A mitigation measure presented in Section 2.7 Hydrology and Flooding that would require a hydrological study prior to development proposals in this area would address the flooding issue and mitigate off-site impacts. The commercial development on these parcels would not be categorized as "intensive" urban. Therefore, the proposed project is **consistent** with this policy.

> ***Urban Growth and Community Design Policy 2c:*** Extensive areas of Class I and II, agricultural land should be retained for agricultural production until the absence of alternative sites requires the conversion of agricultural land to urban uses.

Consistency: The City of Gilroy USA is expected to accommodate growth for an approximate five-year period. As development occurs within the existing USA it is necessary for the City to add new areas to its USA to maintain an approximate five-year inventory of developable land. Most of the land surrounding the City of Gilroy has development constraints, such as the presence of valuable wildlife habitat, scenic resources or prime farmland. Much of the land on which the existing City is built had similar characteristics. As the City grows, a certain amount of these valuable resources are often converted into urban land. The intent of this policy is to preserve the most valuable of the agricultural lands surrounding the City, and focus growth into areas that have relatively less agricultural value, or that are especially appropriate for urban expansion because of their relation to existing uses.

The proposed project would result in the conversion of 54.85 acres of Class I (Prime) agricultural land to residential and commercial uses. The farmland is located in between the approved sports park and existing residential and commercial development to the north and east. Residential land uses are proposed on 27.72 acres and commercial land uses on 27.13 acres. The approved sports park and the proposed residential and commercial development would be developed in phases over an approximate 20-year time span, during which undeveloped portions of the site could remain in agricultural use.

A smaller size project alternative was developed for this SEIR that would reduce agricultural land conversion by approximately 15 acres. A suitable alternative location was identified in northern Gilroy. That site would involve the conversion of 38.1 acres of Prime or Unique Farmland. No alternative project was identified that would not result in the loss of agricultural land. Agricultural issues are discussed in Section 2.2 Agricultural Resources.

> ***Urban Growth and Community Design Policy 3:*** Urban development will only occur within the incorporated portion of the Planning Area. Land will therefore be annexed to the City before final development approval is given.

Consistency: The project site is outside the city limits of the City of Gilroy, but lies within its Planning Area. The purpose of the proposed project is to bring the project site into the City of Gilroy USA and then annex the land to the City of Gilroy, as appropriate development is proposed and approved. Development of the proposed residential and commercial areas would not proceed until this occurs. The sports park is a City sponsored project on City owned land within the jurisdiction of Santa Clara County. The City has autonomous approval power for projects on its own

land, so development may be permitted without the approval of Santa Clara County and without annexation of the sports park site into the City of Gilroy. Furthermore, the sports park use is not urban in nature and is a compatible use in an open space and agricultural area. The proposed project is **consistent** with this policy.

> ***Urban Growth and Community Design Policy 4:*** The City will phase development in an orderly, contiguous manner in order to maintain a compact development pattern to avoid premature investment for the extension of public facilities and services. New urban development will occur in areas where municipal services are available and capacity exists prior to the approval of development in areas which would require major new facility expansion.

Consistency: The project site is contiguous to developed areas of the city located north and east of the project site. The proposed project is **consistent** with this policy.

> ***Urban Growth and Community Design Policy 5:*** The City will establish a phasing plan for guiding future growth in the Planning Area. As of the date of this document, [June 3, 1996] urban development for the next five years will occur within the Urban Service Area. Urban development in the 6-20 year period will occur within the "20-year area."
>
> Urban zoning, development approvals and building permits will only be granted to property within the Urban Service Area. The City will not accept development proposals on land outside the Urban Service Area.
>
> Land located outside the Urban Service Area will be considered an "Urban Reserve." Agriculture will be encouraged as an interim use within the Urban Reserve.

Consistency: The project site is outside the current USA and within the current 20-year planning area, as shown on the *Gilroy General Plan* land use map. The project site was expected to be developed within 6 to 20 years at the time the policy was written in 1996. The project site has been within the 20-year planning area since 1979 when the current general plan was originally adopted. The City of Gilroy has determined that the project site should now be planned for development within the next five years. The proposed project is **consistent** with this policy.

> ***Urban Growth and Community Design Policy 9:*** New development will pay for all of the incremental public service costs which it generates.

Consistency: The city would be reimbursed through development impact fees for the costs associated with providing the necessary services to the proposed project. Public utility services are discussed in Section 2.12 Water Supply and Section 2.13 Wastewater. The City has sufficient capacity in its existing and planned water, sewer and storm drainage systems to accommodate the proposed project. Project developers will be required to extend adjacent existing infrastructure into the project site. The proposed project would be **consistent** with this policy.

> *Natural Environment Policy 1:* Land will be used for the purpose for which it is most suited by virtue of its inherent natural characteristics, as modified by its locational relationships, whether that use be urban development or natural resource preservation.

Consistency: Most of the land surrounding the City of Gilroy has development constraints, such as the presence of valuable wildlife habitat, scenic resources or prime farmland. Much of the land on which the existing City is built had similar characteristics. As the City grows, a certain amount of these valuable resources are often converted into urban land. This policy directs a comparison of the merits of conservation of the natural attributes of the land, and the land's value for development, especially considering its location relative to other land uses and features. The intent of this policy is direct growth into areas that are most appropriate for urban expansion because of their relation to existing uses.

The project site is appropriate for development both because of the types of existing uses that are near it and its relative separation from valuable resources. The project site is located adjacent to existing residential and commercial development on two sides. The project site is on a major City thoroughfare, close to a major U.S. Highway 101 interchange and easily accessible to the rest of the City. Although a small area of agricultural land borders the project site to the south, Uvas Creek provides a natural barrier that separates the project site from most other agricultural areas in southern Gilroy. The sports park, which is already approved for the project site, separates the proposed residential and commercial uses within the project site from the sensitive riparian habitat of Uvas Creek. The proposed project is **consistent** with this policy.

> *Natural Environment Policy 11:* The potential seismic, geologic, and flooding hazards to life and property will be reduced to an acceptable level of risk [reference to *City of Gilroy General Plan* Appendix C].

Consistency: Portions of the project site are within flood zones. Hydrological issues are discussed in Section 2.7 Hydrology and Flooding. A small corner of the area proposed for residential development is located within a 100-year flood zone. Site grading could eliminate potential problems in this area. Most of the area proposed for commercial development is located within a 25-year flood zone, and all of the

commercial area is within a 100-year flood zone. Portions of the proposed commercial area are subject to inundation by as much as three and one-half feet of water during 100-year floods. Inundation to this degree could pose risks to life or property. A mitigation measure presented in Section 2.7 Hydrology and Flooding that would require a hydrological study prior to development proposals in this area, would address the flooding issue and mitigate off-site impacts. Therefore the proposed project is **consistent** with this policy.

> *Natural Environment Policy 23:* In preference to the construction of expensive flood prevention facilities, floodways will be left open for agricultural and recreational use in areas of particular risk and where protection is minimal.

Consistency: The proposed USA amendment includes an approved sports park in an area subject to significant flooding, a use that is consistent with this policy. The project also proposes the designation of commercial uses in a 25-year flood zone with the potential of three and one-half foot deep inundation during 100-year floods. A mitigation measure presented in Section 2.7 Hydrology and Flooding that would require a hydrological study prior to development proposals in this area would address the flooding issue and mitigate off-site impacts. The proposed project is **consistent** with this policy.

> *Natural Environment Policy 41:* Areas subject to natural hazards such as major flooding or soils with a high water table will be encouraged to remain in long-term agricultural production where such use exists.

Consistency: The intent of this policy is to protect people and structures from potential injury or damage as the result of flooding. Portions of the project site are within flood zones. A small corner of the area proposed for residential development is located within a 100-year flood zone. Site grading could eliminate potential problems in this area. Most of the area proposed for commercial development is located within a 25-year flood zone, and all of the commercial area is within a 100-year flood zone. Portions of the proposed commercial area are subject to inundation by as much as three and one-half feet of water during 100-year floods. Inundation to this degree could pose risks to life or property. A mitigation measure presented in Section 2.7 Hydrology and Flooding that would require a hydrological study prior to development proposals in this area would address the flooding issue and mitigate off-site impacts. Therefore the proposed project is partially **inconsistent** with this policy.

Proposed Draft Gilroy 1999-2020 General Plan

The *Draft Gilroy 1999-2020 General Plan* was completed in June 1999. The draft general plan, along with a draft EIR was circulated in August and September 1999

and a Final EIR prepared on October 21, 1999. As of the release of this Draft SEIR for public review, the *City of Gilroy had not yet adopted the Draft Gilroy 1999-2020 General Plan.*

In the *Draft Gilroy 1999-2020 General Plan* the sports park area and levee are designated PARK/RECREATION FACILITY, the parcels to the north of the sports park are designated RESIDENTIAL – NEIGHBORHOOD DISTRICT and the parcels east of the sports park are designated COMMERCIAL – GENERAL SERVICES.

> *Community Design Policy 1.01 Pattern of Development.* Ensure an orderly, contiguous pattern of development that prioritizes infill development, phases new development, encourages compactness and efficiency, preserves surrounding open space and agricultural resources and avoids land use incompatibilities.

Consistency: The project site has been in the City of Gilroy 20-year planning area since 1979. The project site is adjacent to existing commercial and residential development on its north and east sides, is located close to a major freeway interchange and is situated along the principal north-south arterial in the City. The project site is appropriate for inclusion in the USA both because of the types of existing uses that are near it and its relative separation from valuable resources. Although a small area of agricultural land borders the project site to the south, Uvas Creek provides a natural barrier that separates the project site from most other agricultural areas in southern Gilroy. The sports park, which is already approved for the project site, separates the proposed residential and commercial uses within the project site from the sensitive riparian habitat of Uvas Creek. The project site is also appropriate for inclusion in the USA because of its proximity to major transportation facilities, and because services are already available adjacent to the project site to serve existing urban uses. The proposed project is **consistent** with this policy.

> *Growth Management Policy 2.01 Location of Growth.* Maximize existing infrastructure and service investments – and avoid premature investment for facility and service extensions – by directing new growth to vacant and under-utilized land within the Urban Service Area. As a second-tier priority, direct new development to areas that border on existing urban development or are immediately adjacent to the Urban Service Area, prohibiting costly "leap-frog" development and ensuring a compact development pattern.

Consistency: The project site is located immediately adjacent to commercial and residential development within the existing USA on its north and east sides. Existing infrastructure is located adjacent to the project site. The proposed project is **consistent** with this policy.

> *Growth Management Policy 2.02 Rate and Timing of Growth.* Ensure that the rate of growth is controlled such that resource and system capacity constraints are not exceeded (e.g., water supply and sewage treatment) and necessary urban services (such as sewer, water supply, police and schools) are funded, implemented and completed prior to occupation of new buildings.

Consistency: The City of Gilroy will be able to provide services and public utilities to the project site. These services are discussed in Section 2.9 Fire Protection Services, Section 2.10 Police Protection Services, Section 2.11 Schools, Section 2.12 Water Supply and Section 2.13 Wastewater. The *City of Gilroy Draft EIR for the 1999-2000 General Plan* determined that the City of Gilroy would have sufficient sewer capacity to accommodate the proposed land use changes at the project site. Policies in place ensure that water supply infrastructure will also be available for future growth as it occurs. The City has a development impact fee structure that ensures that funding for all services (fire, police, schools) and public utility infrastructure improvements (water, sewer, storm drain) are paid for by the new developments that make them necessary. Development will be required to pay school impact fees as required by State law. Therefore, the proposed project is **consistent** with this policy.

> *Growth Management Policy 2.07 Urban Service Area.* Establish and maintain an Urban Service Area that indicates the area of land that could potentially be developed in the next five years and to which the City is committed to providing basic infrastructure and services. Urban zoning, development approvals, and building permits will only be granted to properties within the Urban Service Area. The City will not accept development proposals on land outside the Urban Service Area, and will coordinate with the County to discourage premature subdivision of such land. Application for inclusion in the Urban Service Area will be accepted annually and evaluated in light of General Plan policies promoting infill development and efficiency in the provision of services.

Consistency: The last USA amendment request by the City of Gilroy was made in October 1997. The project site is located adjacent to existing developed areas on two sides and close to existing infrastructure and services. The project site can be served with short extensions of existing infrastructure. The City of Gilroy has determined that the project site is the next area within its 20-year planning area that should be added to its USA. The proposed project is **consistent** with this policy.

> *Growth Management Policy 2.08 20-Year Boundary.* ...Lands within the 20-Year Boundary are those to which the City expects to provide services in the next 20 years. Applications for Urban Service Area expansions will only be accepted for lands within the 20-Year Boundary.

Consistency: The project site has been in the City of Gilroy 20-year area since the current general plan was originally adopted in 1979. The City has now determined that this land should be added to the USA, to receive urban services and be available for development within a five-year timeframe. The proposed project is **consistent** with this policy.

> *Agriculture Policy 4.03 Urban Containment.* Contain urbanization within an area large enough to meet foreseeable need but which will not intrude unnecessarily on, cause premature conversion of, or impair the productivity of agricultural lands.

Consistency: The City of Gilroy USA is expected to accommodate growth for an approximate five-year period. As development occurs within the existing USA it is necessary for the City to add new areas to its USA to maintain an approximate five-year inventory of developable land. The last USA amendment request by the City of Gilroy was made in October 1997. The project site has been in the City of Gilroy 20-year area since the current general plan was originally adopted in 1979. The City has now determined that this land should be added to the USA, to receive urban services and be available for development within a five-year timeframe.

Most of the land surrounding the City of Gilroy is prime farmland. As the City grows, a certain amount of prime farmland must often be converted into urban land. The *Study of the South County Agricultural Preserve* was a joint effort of Santa Clara County, the City of Gilroy and Santa Clara County LAFCo. The study established the Gilroy Agricultural Lands Area, an area of approximately 15,800 acres of agricultural land to the east and south of Gilroy that will not be developed in the near future. The intent the Gilroy Agricultural Lands Area is to preserve the most valuable of the agricultural lands surrounding the City, and focus growth into areas that have relatively less agricultural value, or that are especially appropriate for urban expansion because of their relation to existing uses.

The proposed project is located outside of the Gilroy Agricultural Lands Area on land that is within the City of Gilroy's 20-year area. The 20-year planning area is that area that is expected to be developed over a 20-years timeframe. The project site is an area that has been planned for future urban development. Therefore, the proposed project is **consistent** with this policy.

> *Educational Facilities Policy 17.02 New Residential Development.* Control the timing and location of new residential development in a way that allows the Gilroy Unified School District to plan and finance facilities in an orderly fashion.

Consistency: Residential development in Gilroy is controlled by the Residential Development Ordinance (RDO). The RDO limits the number of dwelling units that can be approved by the City each year. This limits the rate of growth and allows for

development of new school facilities to accommodate growth. Additionally, the Gilroy Unified School District is allowed to collect school impact fees as allowed by State law. Schools are discussed in Section 2.11. The proposed project is subject to both the RDO process and school fees. Therefore, the proposed project is consistent with this policy.

> *Public Safety Policy 18.01 Standards of Service (Police and Fire).* Continue to provide and maintain police and fire services that are adequate in manpower, equipment and resources to respond to localized emergencies and calls for service within the City. The departments' current levels of service should be maintained or improved as the City continues to grow, with average emergency response times for police services of approximately 4.5 minutes and average emergency response times for fire services of less than 5.0 minutes.

Consistency: The proposed project will not result in a decrease in service for the City of Gilroy Police or Fire Departments. The nearest fire station is located one and one-half miles form the project site. Fire department response times should be well within acceptable standards. Most police responses are from officers in the field, not at the police station. The project site is adjacent to areas already within the service area of the Gilroy Police Department and response times would be within the acceptable standards. Proposed development within the project site will be required to pay public safety impact fees. Police and Fire services are discussed in Section 2.9 Fire Protection Services and Section 2.10 Police Protective Services. The proposed project is **consistent** with this policy.

> *Infrastructure Policy 19.02 Location of Development (Water Supply).* Locate new development in the areas that are most easily supplied by Gilroy's current water system.

Consistency: The project site is located adjacent to existing water supply lines beneath Monterey Street and planned water supply lines in Monterey Frontage Road that will provide water to the approved sports park on the project site. A recycled water line is planned to serve the sports park irrigation needs. The project site can be easily supplied with water from existing and approved water supply infrastructure. The project site is located in the City's Pressure Zone 1, which is the City's low-elevation land. No pumping is required to serve this area. Water Supply is discussed in Section 2.12 Water Supply. Because the project site is located near existing pipes and does not require pumping, the proposed project is **consistent** with this policy.

> ***Infrastructure Policy 19.04 Timing and Location of Development (Sewer).*** Manage the timing and location of new development according to the ability of the sewer system and treatment plant to accommodate the effluent generated by the proposed development. Ensure that adequate sewer and treatment capacity is funded and in place prior to occupation of new buildings.

Consistency: The City of Gilroy operates a joint sewage treatment plant with the City of Morgan Hill. According to the *City of Gilroy Draft EIR for the 1999-2000 General Plan*, the sewage treatment plant would have sufficient sewer capacity to accommodate the proposed land use changes at the project site. A sewer trunk line is located beneath Monterey Street, and an extension will be constructed to the project site to serve the approved sports park. The project site would be easily served by the existing and approved sewer infrastructure. Sewer service is discussed in Section 2.13 Wastewater. The proposed project is **consistent** with this policy.

Gilroy Zoning Ordinance

The *Gilroy City Council adopted the City of Gilroy Zoning Ordinance* on August 15, 1983. The Gilroy City Council adopted the most recent amendments on February 17, 1998.

The proposed project would consist of a residential area and commercial area. The proposed RESIDENTIAL – NEIGHBORHOOD DISTRICT general plan land use designation is compatible with several zoning districts, including any residential district, PO - Professional Office and C1 - Neighborhood Commercial. The non-residential uses should be carefully sited based on guidelines in the *Draft Gilroy 1999-2020 General Plan*. The proposed COMMERCIAL – GENERAL SERVICES general plan land use designation is compatible with C3 Shopping Center Commercial, HC Highway Commercial and CM Commercial Industrial zoning. It is potentially compatible with PO Professional Office and C-1 Neighborhood Commercial zoning. The approved sports park is compatible with PF Public Facility zoning.

If the City of Gilroy adopts the new general plan with its new land use designations, and if LAFCo approves the City's USA amendment request, the City would assign zoning districts that are compatible with the general plan land use designations.

Santa Clara County General Plan

The project site is currently under the jurisdiction of Santa Clara County. The *Santa Clara County Board of Supervisors adopted the Santa Clara County General Plan* on December 20, 1994. The General Plan land use designation for the project site is Open Space Reserve (OSR). The following *Santa Clara County General Plan* policies are relevant to the proposed project.

> ***Land Use Policy R-LU 45:*** Open Space Reserve (OSR) lands include rural unincorporated areas contiguous to a city Urban Service Area (USA) for which no permanent land use designation was applied pending future joint studies by affected jurisdictions of desired long-term land use patterns.

Consistency: This policy defines the county's current land use designation for the project site. The county has not determined long-term land use for the project site. The project site has been in the City of Gilroy 20-year Planning Area since the current general plan was adopted in 1979. The project site is designated as OPEN SPACE and PARK/PUBLIC FACILITY in the current *Gilroy General Plan*. The *Draft Gilroy 1999-2020 General Plan* designates portions of the project site for residential, commercial and open space uses.

The City of Gilroy, County of Santa Clara and Santa Clara County LAFCo conducted a joint study of agricultural lands near Gilroy. The project site was not considered for inclusion in the agriculture study area. The study resulted in the designation of the Gilroy Agricultural Lands Area to protect the economic viability of agriculture and to direct urban growth in a sustainable pattern elsewhere in the vicinity of Gilroy.

The project site has a non-committed land use designation in the Santa Clara County General Plan. The City of Gilroy has a current general land use designation of OPEN SPACE and PARK/PUBLIC FACILTY and proposed general land use designations of RESIDENTIAL NEIGHBORHOOD DISTRICT, COMMERCIAL GENERAL SERVICES and PARK/PUBLIC FACILITY. The proposed project is **consistent** with this policy.

> ***Land Use Policy R-LU 49:*** For lands within the vicinity of the City of Gilroy designated OSR, joint studies should be conducted to resolve and define:
>
> a. areas to be reserved for future urban growth;
>
> b. areas to be reserved for long-term agricultural use; and
>
> c. other planning objectives identified within the South County Joint Area Plan deemed appropriate to the OSR areas.

Consistency: The *Study of the South County Agricultural Preserve* was a joint effort of Santa Clara County, the City of Gilroy and Santa Clara County LAFCo. The study established the Gilroy Agricultural Lands Area, an area of approximately 15,800 acres of agricultural land to the east and south of Gilroy that will not be developed in the near future. The proposed project is located outside of the Gilroy Agricultural Lands Area on land that is within the City of Gilroy's 20-year area. The 20-year planning area is that area that is expected to be developed over the next 20 years. The proposed project is **consistent** with this policy.

The following policies from the *Santa Clara County General Plan* concern urban growth and expansion of Urban Service Areas.

> *Growth and Development Policy C-GD 1:* Most of the future urban growth of Santa Clara County should be accommodated within the existing urban areas, through infill development, rather than expansion of the urbanized area into hillsides and resource areas.

Consistency: The proposed project would expand growth into an area that contains prime farmland, a valuable resource. However, the land is contiguous with developed portions of the City of Gilroy to the north and east and additional urban development exists within one-half mile to the west of the project site. The project site is a pocket of agricultural land that is largely surrounded by urban development. A review of the approved but not yet developed or completed projects in the City of Gilroy indicates that growth does take place within, or adjacent to, urban areas. The proposed project is **consistent** with this policy.

> *Growth and Development Policy C-GD 2:* Urban development shall occur only within cities' urban service areas (USAs) and under city jurisdiction. The County shall not allow urban development on unincorporated lands outside cities' urban service areas.

Consistency: The proposed project includes the addition of the project site to the City of Gilroy USA, which is a preliminary step to annexation. No residential or commercial development will be allowed on the project site until the project site is added to the USA and annexed. The proposed project is **consistent** with this policy.

> *Growth and Development Policy C-GD 3:* Urban service areas should generally include only those areas suited for urban development. Development of such areas should be:

a. reasonably serviceable with public facilities and services;

b. relatively free from risks associated with natural hazards;

c. without substantial adverse environmental impact;

d. not likely to create severe off-site impacts on surrounding areas; and

e. without cumulative adverse impacts on the county's water supply watersheds or any other natural resources.

Consistency: Each of these factors is considered below:

a. The proposed project is located close to existing public services and would be easily served by the City of Gilroy.

b. The project site is located within a flood zone. Most of the area within the flood zone will be used for the approved sports park, which is an acceptable use of a flood zone. A portion of the flood zone is proposed for commercial uses. This is a potentially significant impact. A mitigation measure presented in Section 2.7 Hydrology and Flooding that would require a hydrological study prior to development proposals in this area would address the flooding issue and mitigate off-site impacts.

c. The proposed project would convert prime farmland to non-agricultural uses. This is a significant unavoidable impact. A reduced size alternative project was developed and an alternative site was found for analysis in this SEIR. Both of these alternatives involved some level of environmental impacts. Except for the loss of Prime Farmland, which is an impact of all of the alternative projects other than the "No Project" alternative, the environmental impacts could be reduced to a less than significant level.

d. The proposed project would not create severe off-site impacts on surrounding areas. Because the project site is close to major transportation corridors traffic to and from the proposed project will not have a significant impact on local streets, nor will it have a significant impact on traffic on U.S. Highway 101. It is possible that grading to prevent potential flooding could result in increased off-site flooding. A mitigation measure presented in Section 2.7 Hydrology and Flooding that would require a hydrological study prior to development proposals in this area would address the flooding issue and mitigate off-site impacts. Mitigation measures presented in the EIR would mitigate other potential off-site impacts to a less than significant level.

e. The proposed project would not result in cumulative adverse impacts on the county's water supply watersheds or other natural resources.

The proposed project is **inconsistent** with this item b and item c of this policy. The proposed project may have significant impacts from flooding and would have unavoidable significant impacts in regard to the loss of prime agricultural land.

> *Growth and Development Policy C-GD 5:* Lands generally unsuitable for urban development may be allowed to annex to cities or be included in urban service areas only if the land is preserved as a non-urban open space use.

Consistency: A large portion of the project site is located in a flood zone. Most of the project site that is susceptible to severe flooding is proposed for use as athletic fields and parkland. This is an acceptable use of a flood area and consistent with this policy. A portion of the flood zone is proposed for commercial uses. This is a potentially significant impact. A mitigation measure presented in Section 2.7

Hydrology and Flooding that would require a hydrological study prior to development proposals in this area would address the flooding issue and mitigate off-site impacts. The proposed project is **consistent** with this policy.

> *Growth and Development Policy C-GD 6:* Hazard and resource areas with the following characteristics shall be considered unsuited for urban development:
>
> a. flood potential, including areas designated as floodways, tidal zones, coastal high hazard areas and federal flood insurance rate zones by the National Flood Insurance Program.

Consistency: A large portion of the project site is located in a flood zone. Most of the project site that is susceptible to severe flooding is proposed for use as athletic fields and parkland. This is an acceptable use of a flood area and consistent with this policy. A portion of the flood zone is proposed for commercial uses. This is a potentially sig≈nificant impact. A mitigation measure presented in Section 2.7 Hydrology and Flooding that would require a hydrological study prior to development proposals in this area would address the flooding issue and mitigate off-site impacts. The proposed project is **consistent** with this policy.

> *Growth and Development Policy C-GD 6:* Hazard and resource areas with the following characteristics shall be considered unsuited for urban development:
>
> e. prime agricultural soils.

Consistency: The proposed project would convert prime farmland to non-agricultural uses. This is a significant unavoidable impact. A reduced size alternative project was developed and an alternative site was found for analysis in this SEIR. Both of these alternatives involved some level of environmental impacts. Except for the loss of Prime Farmland, which is an impact of all of the alternative projects other than the "No Project" alternative, the environmental impacts could be reduced to a less than significant level. The proposed project is **inconsistent** with this policy.

> *Growth and Development Policy C-GD 7*: Urban expansion should be planned on a staged, orderly basis, consistent with applicable plans (e.g. city, County, countywide plans) and the availability of needed urban services and facilities. The discouragement of expansion of cities' Urban Service Areas should be recommended to the LAFCO.

Consistency: The project site has been in the City of Gilroy planning area since 1979 when the current general plan was adopted. The 20-year planning area is expected to accommodate approximately 20 years of urban growth. The City of

Gilroy USA is expected to accommodate growth for an approximate five-year period. As development occurs within the existing USA it is necessary for the City to add new areas to its USA to maintain an approximate five-year inventory of developable land. The City has determined that the project site should now be added to the USA.

The project site is contiguous with developed portions of the City of Gilroy to the north and east and additional urban development exists within one-half mile to the west of the project site. The project site is a pocket of agricultural land that is largely surrounded by urban development. Development of the project site would result in orderly expansion of the City.

Urban services are available close to the project site and will be extended into the project site to serve the approved sports park. The proposed project is **consistent** with this policy.

> *Growth and Development Policy C-GD 8*: Proposals to annex land or expand a city's urban service area boundaries shall be approved only if:
>
> a. the city, special districts and affected school districts have the ability to provide all needed public services and facilities to the area within five years and without lessening existing levels of service;
>
> b. the existing supply of land within the city's USA accommodates no more than five years of planned growth;
>
> c. the area proposed for urban development is contiguous to existing urban areas.

Consistency: Each of these factors is considered below:

a. The City of Gilroy has approved the Gilroy Sports Park for a portion of the project site and will provide potable water, recycled water and sewer service to the project site for that project. The city has adequate potable water and recycled wastewater supplies and sufficient wastewater treatment capacity to accommodate the proposed project. The proposed project would be served by the city police and fire departments without the need for new facilities. The Gilroy Unified School District will collect development impact fees from development that occurs on the project site as allowed by State law.

b. Land within Gilroy's Urban Service Area is expected to be substantially developed within five years. As development occurs within the existing USA it is necessary for the City to add new areas to its USA to maintain an approximate five-year inventory of developable land. The City of Gilroy last requested a USA amendment in October 1997. The City has determined that the project site should now be added to the USA.

c. The project site is contiguous with urban development on the north and east.

The proposed project is **consistent** with this policy.

Growth and Development Policy C-GD 9: Proposals to annex land or expand the USA of a city for the purpose of adding lands for employment should be approved only if:

a. lands planned for employment overall do not exceed the capacity of the city's planned housing supply; or

b. the city's housing element of its General Plan can document that the housing needs of all segments of the community population are being met as stipulated by state law.

Consistency: Each of these factors is considered below:

a. The maximum probable development of the project's commercial parcels does not exceed the capacity of the City of Gilroy's planned housing supply.

b. The City of Gilroy has recently updated its Housing Element, although it has yet to be certified by the State. Figure 5-1 of the housing element contains a summary of quantified objectives, 1988—2001. The estimates are based on past program performance, construction trends, land availability, and future program funding assumptions. The objectives address below market rate units, rehabilitated or replaced units, very low, low, moderate and above moderate income units.

The proposed project is **consistent** with this policy.

Santa Clara County Local Agency Formation Commission Policies

The local agency formation commissions were created by the Knox-Nisbet Act passed by the State legislature in 1963 to govern changes in the boundaries and organization of cities and special districts in California. This act was supplemented by the District Reorganization Act of 1965 and the Municipal Organization Act of 1977. These three laws were consolidated under the Cortese-Knox Local Government Reorganization Act of 1985 (Government Code section 56000 et seq.).

Urban Service Area Amendment Policy 1: LAFCO will review/amend a city's Urban Service Area once a year, if such review is desired by the city and initiated by city resolution and application. Until a city's application has been heard and acted upon by the Commission, no further Urban Service Area amendments will be accepted for filing from that city. LAFCO may make an exception to the "once a year"

limitation upon Urban Service amendment requests where amendment is needed to carry out some special institutional development or activity that is in the public interest. Such exception shall not normally be extended in connection with proposed residential, commercial, or industrial development.

Consistency: The City of Gilroy originally applied to LAFCo for a USA amendment for the project site in June 1999. LAFCo requested additional environmental review. The additional information and revised request is expected to be presented for LAFCo consideration in May 2000. The most recent previous amendment request was filed in October 1997. The proposed project is **consistent** with this policy.

Urban Service Area Amendment Policy 2: LAFCO will require application of an appropriate General Plan designation to territory proposed for inclusion in an Urban Service Area.

Consistency: The parcels comprising the sports park would have a general plan designation of PARK/RECREATION FACILITY. The proposed commercial areas would be designated COMMERCIAL — GENERAL SERVICES and the proposed residential areas would be designated RESIDENTIAL — NEIGHBORHOOD DISTRICT. These proposed designations are appropriate for their proposed uses. If the *City of Gilroy adopts the Draft Gilroy 1999-2000 General Plan*, the proposed project would be **consistent** with this policy.

Urban Service Area Amendment Policy 3: LAFCO encourages contractual agreements and/or plans between the cities and the County which define:

a. Growth at the urban fringe; and

b. Potential, new growth areas.

Consistency: The *Study of the South County Agricultural Preserve* was a joint effort of Santa Clara County, the City of Gilroy and Santa Clara County LAFCO. The study established an area of approximately 15,800 acres to the east and south of Gilroy as the Gilroy Agricultural Lands Area. The proposed project is located outside of the agricultural lands area on land that has been in the City of Gilroy 20-year planning area since 1979. The proposed project is **consistent** with this policy.

Urban Service Area Amendment Policy 4: LAFCO will consider factors such as the following to determine the local and regional impacts of a proposed Urban Service Area amendment:

a. The ratio of lands planned for residential use to land planned for employment-producing use;

b. The existence of adequate regional and local transportation capabilities to support the planned city growth;

c. Ability of the city to provide urban services to the growth areas without detracting from current service levels;

d. The ability of school districts to provide school facilities;

e. Whether the conversion of agricultural and other open space lands is premature, or if there are other areas into which to channel growth;

f. The role of special districts in providing services;

g. Environmental considerations which may apply;

h. The impacts of proposed city expansion upon the County as a provider of services;

i. Fiscal impacts on other agencies.

Consistency: Each of these factors is discussed below:

a. The proposed project would include approximately equal acreage of residential use and commercial use. The residential uses would generate approximately 500 residents. A fiscal analysis has been prepared that evaluates the number of job opportunities expected to be generated by the proposed commercial development.

b. The proposed project is served by U.S. Highway 101, Monterey Street and other local streets, and the extension of the Uvas Creek Trail, which has been approved. Bus service is planned to serve the sports park and the sports park master plan includes a bus turn-around and stop.

c. The City of Gilroy will extend domestic and recycled water supply lines and sewer lines to the project site as part of the approved sports park project. The City of Gilroy police and fire departments would provide public safety services to the project site. The City has existing or planned capacity to accommodate the proposed project without any decrease in the level of service available to other areas of the city. The project site was included in the City's *Water Master Plan* and *Sewer Master Plan.*

d. The proposed project will add approximately 135 students to Gilroy schools. The Gilroy Unified School District would collect impact fees as allowed by State law.

e. The proposed project would result in the conversion of 54.8 acres of agricultural land to urban uses. The project site has been in the City of Gilroy 20-year planning area since the adoption of the current *Gilroy General Plan* in 1979. Most of the land surrounding the City of Gilroy has development constraints, such as the presence of valuable wildlife habitat, flooding risks or prime farmland. Much of the land on which the existing City is built had similar characteristics. The alternative site that was identified for study in this SEIR also contained substantial areas of farmland. As the City to grows, a certain amount of these valuable resources are often converted into urban land. The City is preparing a vacant land analysis to quantify the type and extent of vacant land available within its USA.

f. The Santa Clara Valley Transportation Authority would continue to provide public transportation at the project site. An additional service may be extend into the project site. The City of Gilroy would provide most direct services.

g. The USA amendment is subject to the environmental analysis of this SEIR. The proposed project would result in the conversion of prime agricultural land to non-agricultural uses, which is an unavoidable significant impact. Other potential impacts have been identified in this EIR and mitigation measures are presented to reduce those impacts to a less than significant level.

h. The City of Gilroy would provide police, fire and general government services currently provided by the county if the proposed project is approved. No water or sewer services are currently provided to the project site. The County would continue to provide some community health and social services to residents at the project site. Demand for these would increase with the increase in population. An increase in population within city limits would to some extent also impact County services for law enforcement and parks. A fiscal analysis has been prepared for the proposed project.

i. The Santa Clara Valley Transportation Authority may incur increased costs to serve the project site.

The proposed project is generally **consistent** with this policy.

> ***Urban Service Area Amendment Policy 5:*** When a city with a substantial supply of vacant land within its Urban Service Area applies for an Urban Service Area expansion, LAFCO will require an explanation of why the expansion is necessary, and how an orderly, efficient growth pattern, consistent with LAFCO mandates, will be maintained.

Consistency: The City of Gilroy is preparing a vacant land analysis to quantify the type and extent of vacant land available within its USA. Since no additions have been made to the Gilroy USA in approximately two years, it is expected that land within Gilroy's existing USA will be substantially built within five years. Refer to Figure 7 for the boundaries of the existing USA. The project site has been in the City of Gilroy planning area since the current *Gilroy General Plan* was adopted in 1979. The project site is contiguous with developed portions of the City of Gilroy to the north and east and additional urban development exists within one-half mile to the west of the project site. The project site is a pocket of agricultural land that is largely surrounded by urban development. Development of the project site would result in orderly expansion of the City. Urban services are available close to the project site and will be extended into the project site to serve the approved sports park. The proposed project is **consistent** with this policy.

> ***Urban Service Area Amendment Policy 6:*** The Commission will discourage Urban Service Area expansions which include agricultural or other open space land unless the city has accomplished one of the following:
>
> a. Demonstrated to LAFCO that effective measures have been adopted for protecting the open space status of the land. Such measures may include, but not be limited to, establishment of agricultural preserves pursuant to the California Land Conservation Act; adoption of City/County use agreements or applicable specific plans; implementation of clustering or transfer-of-development-rights policies; evidence of public acquisition; or
>
> b. Demonstrated to LAFCO that conversion of such lands to other than open space uses is necessary to promote the planned, orderly, efficient development of the city.

Consistency: About 85 acres of the project site will be used for a sports-park and open space corridor. Additionally the City of Gilroy has established an agricultural preserve to protect a large area of agricultural land near the City. The establishment of the *Gilroy Agricultural Lands Area* was a joint effort of Santa Clara County, the City of Gilroy and Santa Clara County LAFCo that sets aside an area of approximately 15,800 acres to the east and south of Gilroy as an agricultural preserve.

The proposed project is located outside of the agricultural preserve on land that has been in the City of Gilroy's 20-year growth area since the current *Gilroy General Plan* was adopted in 1979. The proposed project is **consistent** with this policy.

> ***Urban Service Area Amendment Policy 7:*** The Commission will consider whether an Urban Service Area amendment, leading to the conversion of agricultural or other open space land, will adversely affect the open space resources of the County. Factors to be studied include, but are not limited to:

a. The agricultural significance of the amendment area relative to other agricultural lands in the region (soil, climate, water-related problems, parcel size, current land use, crop value, Williamson Act contracts, etc.);

b. The economic viability of use of the land for agriculture;

c. Whether public facilities, such as roads, would be extended through or adjacent to other agricultural lands in order to provide services to anticipated development in the amendment area;

d. Whether the amendment area is adjacent to or surrounded by existing urban or residential development.

Consistency: The proposed project's consistency with this policy is analyzed separately for each factor:

a. The project site is adjacent to the urbanized area of Gilroy and included within the city's 20-year planning area. The Gilroy Agricultural Lands Area has been established on 15,800 acres east and south of the city to maintain the agricultural viability of that area. The project site has been planned for development and is not within the agricultural preserve. Four of the parcels on the project site were previously under Williamson Act contracts, but those have expired.

   The project site is classified as Prime Farmland. The project site was most recently planted in corn. Based on the 1997 Santa Clara County crops report, agricultural production on the 54.85 acres that will be taken out of production by the proposed project is estimated to have been worth $136,028. Approximately 1,130 acres of Santa Clara County's farmland were planted to corn in 1977. The project site represents a relatively small part of the County's agriculture, and is not contiguous with the larger areas of agricultural land in the Santa Clara Valley.

b. The project site is surrounded by urban development on the north and east sides. Land which is largely surrounded by urban land is generally less viable economically for agricultural use compared to lands which are in wholly agricultural areas (Crawford, Multari and Starr 1995).

c. No new roads or other infrastructure would be built through other agricultural lands to serve the proposed project. Access to the project site would be from Monterey Street, the principal north-south arterial in Gilroy, and West Luchessa Avenue, an east-west arterial.

d. The project site is adjacent to developed areas on its north and east sides. Additional urban development exists within one-half mile to the west of the project site.

The project site is adjacent to urbanized land on two sides and is within the city's 20—year urban growth boundary. Although the proposed project would convert prime farmland to other uses, because of the project site's proximity to urban development, its relatively small contribution to agricultural production and its large proportion of open space uses, the proposed project would not have an adverse effect on the County's open space resources. The proposed project is generally **consistent** with this policy.

> *Urban Service Area Amendment Policy 7:* Where appropriate, LAFCO will consider adopted policies advocating maintenance of greenbelts or other open space around cities in reviewing Urban Service Area amendments.

Consistency: The *Study of the South County Agricultural Preserve* was a joint effort of Santa Clara County, the City of Gilroy and Santa Clara County LAFCO. The study established an area of approximately 15,800 acres to the east and south of Gilroy as an agricultural preserve. The proposed project is located outside of the agricultural preserve on land that is within the City of Gilroy's 20-year growth area.

Through its General Plan policies the City of Gilroy has established Uvas Creek as an open space and habitat preservation corridor. The approved sports park site expands the existing buffer along this riparian area. The project site will include portions of Uvas Creek and protect them as open space. The proposed project is **consistent** with this policy.

Santa Clara County Congestion Management Plan

The Santa Clara Valley Transportation Authority (VTA) is the designated Congestion Management Agency (CMA) for the County of Santa Clara. California's Congestion Management Program (CMP) legislation requires that all CMAs develop a uniform program for evaluating the transportation impacts of land-use decisions on the designated CMP System. The CMP instructs member agencies to prepare a Transportation Impact Analysis (TIA) for proposed projects that are expected to result in 100 or more peak hour vehicle trips.

Consistency Analysis. The proposed project was prepared according to the VTA Guidelines. This TIA is summarized in the Transportation section of this SEIR. The complete TIA included in the technical composite, which is available for review at the City of Gilroy Planning Division, 5351 Rosanna Street, Gilroy California. Therefore, the proposed project is **consistent** with this policy.

Bay Area Air Quality Management District 1997 Clean Air Plan

The 1997 *Clean Air Plan* was adopted by the BAAQMD on December 17, 1997. The plan is an update to the 1991 and 1994 Clean Air Plans, enacted pursuant to the California Clean Air Act of 1988, as amended. The Clean Air Act requires air districts that exceed State ozone standards to reduce pollutant emissions by five percent per year, or take all feasible measures to achieve emissions reductions.

The principal strategies for ozone reduction that are relevant to the proposed project are the reduction of automobile trips and traffic congestion, the provision of transit and encouragement of bicycle and pedestrian travel.

Consistency: The proposed project would be accessible by automobile from U.S. Highway 101 and major local streets, by public bus service planned to serve the entry gate area of the approved sports park on the project site, and by non-motorized means through the Uvas Creek Trail and on-street bicycle lanes, and pedestrian pathways and sidewalks. URBEMIS7 modeling was performed in January 2000 in conjunction with preparation of this SEIR. Project-associated automobile emissions were projected to exceed thresholds established by the BAAQMD for the combined project, although individual components of the proposed project were within the thresholds. The proposed project includes land use and transportation designs to encourage alternative transportation use.

General plans, master plans, annexations and similar projects are judged for consistency with the *Clean Air Plan* based on use of consistent population projections. According to the *Draft EIR for the City of Gilroy 1999-2000 General Plan* the proposed general plan population projections are consistent with the Association of Bay Area Government 1996 forecast, which was used in developing the *1997 Clean Air Plan.* Therefore, the proposed general plan is consistent with the Clean Air Plan. The proposed project is consistent with the proposed general plan, therefore the proposed project is **consistent** with this plan.

1.7 EIR Uses

As mandated by CEQA Guidelines section 15124(d), this section contains a list of agencies that are expected to use the EIR in their decision-making, and a list of the approvals for which the EIR will be used. These lists include information that is known to the lead agency.

Agencies Expected to Use the EIR for Approvals

Lead Agency

City of Gilroy

- Urban Service Area Amendment Request (approved on June 7,1999 based on certified EIR)
- Annexation
- Zoning
- Tentative Subdivision Map
- Architectural and Site Review

Regional Agencies

Santa Clara County Local Agency Formation Commission

- Urban Service Area Amendment

Santa Clara Valley Water District

- Development Permit for construction within 50 feet of a waterway.

State Agencies

California State Department of Water Resources

- General Development Storm Water Discharge Permit

2.0 Environmental Setting, Impacts and Mitigation Measures

The proposed project is the addition of 140.21 acres to the City of Gilroy USA. This SEIR analyzes the potential environmental effects of the USA amendment request under the proposed *Draft Gilroy 1999-2020 General Plan* land use designations, including the subsequent build-out of the proposed residential and commercial areas. This SEIR will consider impacts of the approved sports park to be developed on the project site as a part of cumulative impacts.

Environmental impacts are categorized into five levels of impacts: beneficial; no impact; less than significant; significant (or potentially significant) and significant and unavoidable.

2.1 Aesthetics

Environmental Setting

Viewing Points

The project site is located adjacent to West Luchessa Avenue, Monterey Street and Monterey Frontage Road and 300 to 1,100 feet west of U.S. Highway 101. The project site is visible from these roads and adjacent property. The level ground and lack of distinctive features within the project site makes it difficult to discern where one parcel on the project site ends and another begins. Easily discernable features such as the roads and Uvas Creek mark the edges of the project site. U.S. Highway 101 affords a better overview of the project site than other roadways because of the slight elevation of the highway.

U.S. Highway 101 is designated in the *Gilroy General Plan* as a scenic corridor, although the California Department of Transportation does not categorize U.S. Highway 101 as either an Officially Designated or Eligible Scenic Highway.

Visual Character of the Project Site

The project site has a pastoral rural ambiance, with clusters of farm buildings and cultivated farm fields set to a backdrop of riparian vegetation lining the banks of Uvas Creek. The land is primarily undeveloped farmland with several houses and their associated farm buildings located apart from one another along the eastern side

of the project site. Figure 12 shows the existing character of the project site. A propane gas facility is located at the corner of Monterey Street and West Luchessa Avenue. This corner is out of character with the remainder of the project site, but in character with other land uses north and east of the project site along Monterey Street.

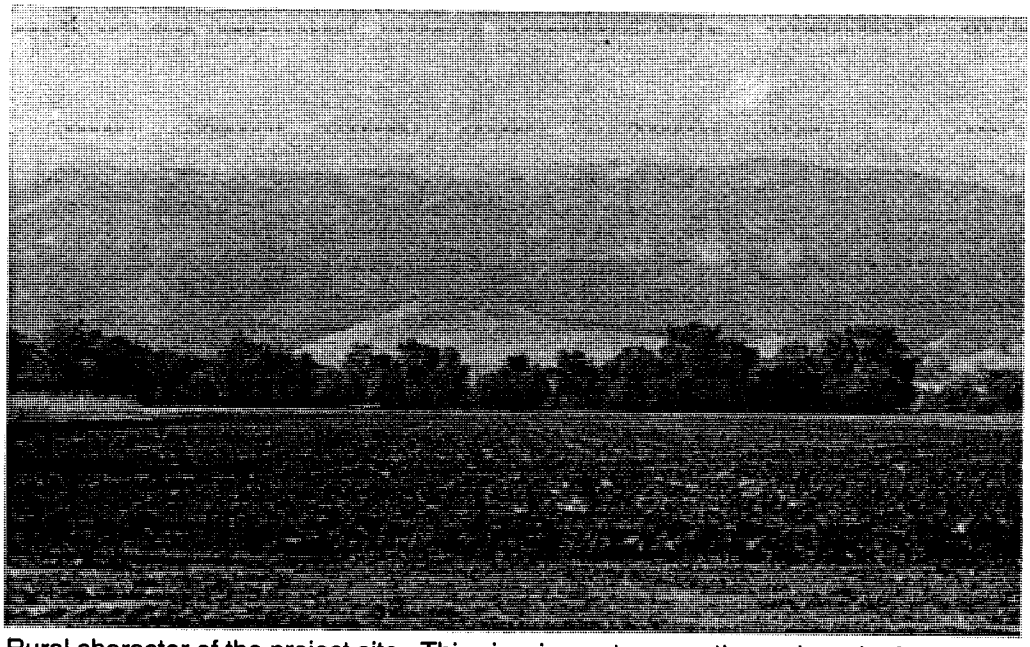
The approved sports park will occupy approximately half of the project site and will largely remain as open space, although the core area of the sports park will include parking for approximately 1,050 vehicles. Median strip plantings, other landscaped areas and the green of the irrigated athletic fields would soften the paved areas visual effects. The approved sports park will be constructed on the portions of the project site farthest from the key viewpoints of U.S. Highway 101 and West Luchessa Avenue.

Visual Character of the Surrounding Area

Adjacent land uses to the north and east of the project site present an abrupt edge to the predominately rural feeling of the project site. There are two hotels on the eastern side of Monterey Street, between U.S. Highway 101 and the project site. Existing houses fronted by a six-foot tall concrete wall are visible immediately north of West Luchessa Avenue. Additional urban development is located to the east of U.S. Highway 101. The project site is on the southern edge of the Gilroy urbanized area.

Sports Park Nighttime Lighting

Each field at the sports park will be equipped with field lights for illumination of nighttime games. Athletic field lighting is generally quite intense and may be visible for a mile or more away. Recent technical advances have resulted in lighting that is more directed and has less "spillage" into surrounding areas. This type of lighting technology will be used at the Gilroy Sports Park. Each softball/baseball field will have six light poles. The two poles located nearest home plate will be approximately 50 feet tall and contain three to four lights each. Two poles located near first and third base will be approximately 50 feet tall and contain six to nine lights each. Two 60- to 70-foot poles will be located in the outfield and contain ten to fifteen lights each. In most instances one soccer field will be overlaid on two softball/baseball fields. Therefore, soccer fields will be lit by up to 12 light sets. Field lights would be turned on only for fields on which there were games scheduled on a particular night. They would be used most often for league play as opposed to tournament play (Derek McKee, personal communication, November 13, 1998). Figure 13 illustrates the location of lighting stanchions in relation to the proposed residential area.



Rural character of the project site. This view is west across the project site from Monterey Frontage Road.



Urban character of surrounding areas. This photo shows an existing motel east of the project site with a second under construction. A residential area is located to the north of the project site.

Source: EMC Planning Group Inc.

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Project Site Visual Character

Figure 12

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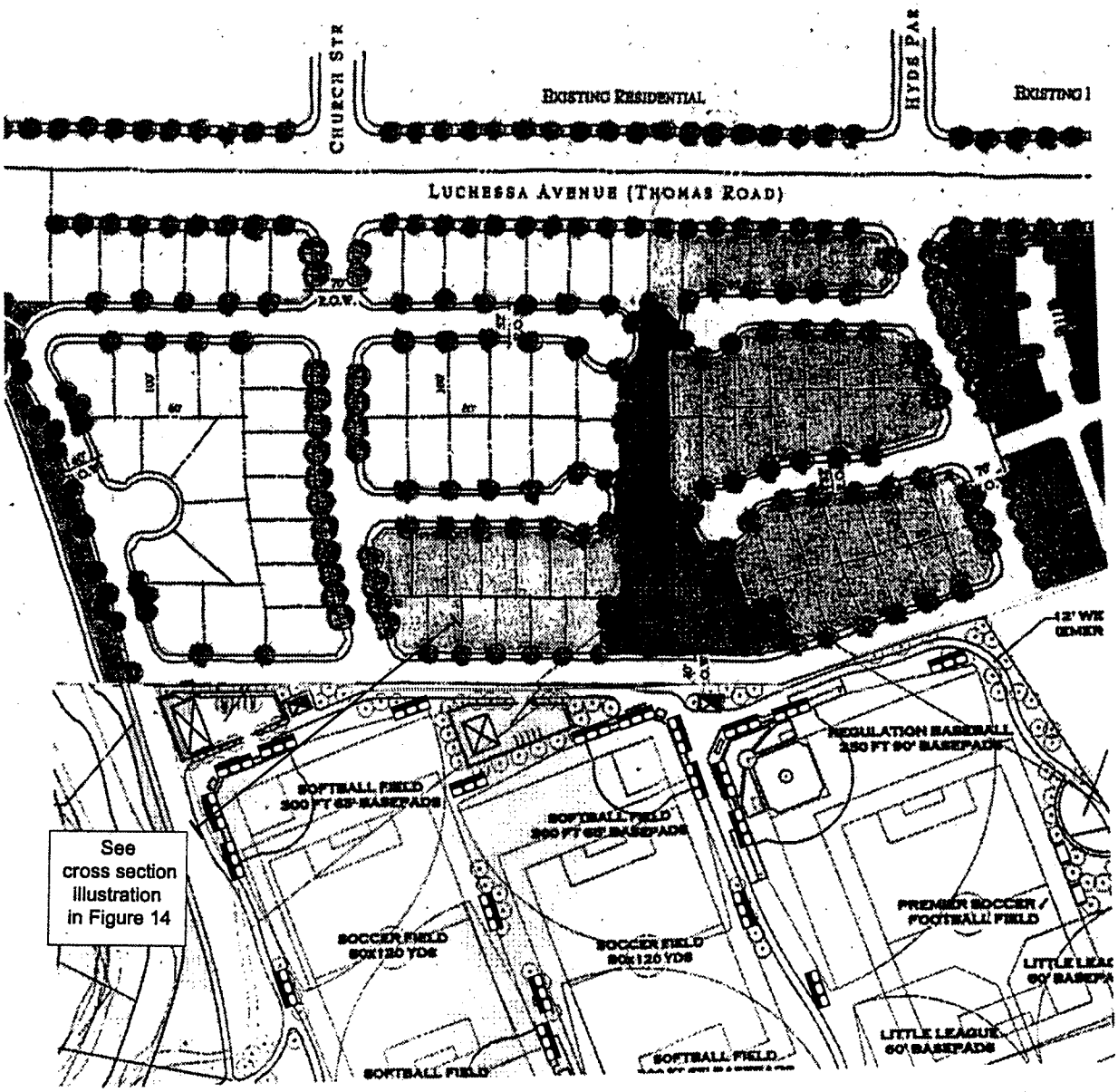

Approximate location of field lights

Source: beals group inc., Greystone homes and EMC Planning Group Inc.

Scale: 1" = 200'

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Location of Field Lighting Relative to Residential

Figure **13**

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Project Analysis

Changes to the Visual Character of the Area

Development of the project site would permanently alter the existing rural character of the area. Residential development would take place on the northern edge of the project site, along West Luchessa Avenue. The residential development would be similar in character to the existing residential development to the north of West Luchessa Avenue. The RESIDENTIAL – NEIGHBORHOOD DISTRICT designation of the project site would allow development that is denser than the existing residential development. The residential development would be compatible in visual character with the existing residential land uses in the vicinity. Views into the project site from West Luchessa Avenue would be mostly blocked by residential development. On the conceptual residential plan, the back fences of the proposed residential area would front on West Luchessa Avenue.

Commercial development is expected to average two-stories in height. Individual buildings could be as high as four stories under the provisions the proposed general plan designation. Approximately 25 percent of the parcels would be covered by buildings. Views into the sports park area would be partially obscured by the commercial buildings. The extent to which the view is obscured would depend on the exact site design of the commercial area. The commercial buildings would be a substantial increase in urbanization in the viewshed, but would be similar in nature to existing hotels and commercial uses nearby along Monterey Street.

Sports Park Nighttime Lighting

Three of the athletic fields at the Gilroy Sports Park will be located along the northern edge of the sports park, adjoining the southern edge of the proposed residential area. One of these fields is planned for the second phase of sports park construction (the first phase of athletic field construction) and two of the fields are planned for the fourth phase of sports park construction (the third phase of athletic field construction). The first field could be expected to be built within one or two years and the second and third fields in the three to five year timeframe. The infield areas are located nearest to the houses. Based on the conceptual plan for the proposed residential area, approximately 15 houses would be in located in the tier of homes nearest the sports fields. These houses would be located approximately 100 feet from the nearest athletic field lights. While these lights would be aimed away from or at right angles to the row of houses and no light from these nearest field lights would shine towards the houses, athletic field lights located 400 to 500 feet from these houses would be directed in the general direction of the houses. These field lights would be directly visible from these houses' windows. Figure 14 includes a cross-section illustrating the light stanchions and proposed residential development and a row of trees (at maturity) proposed as a mitigation measure.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

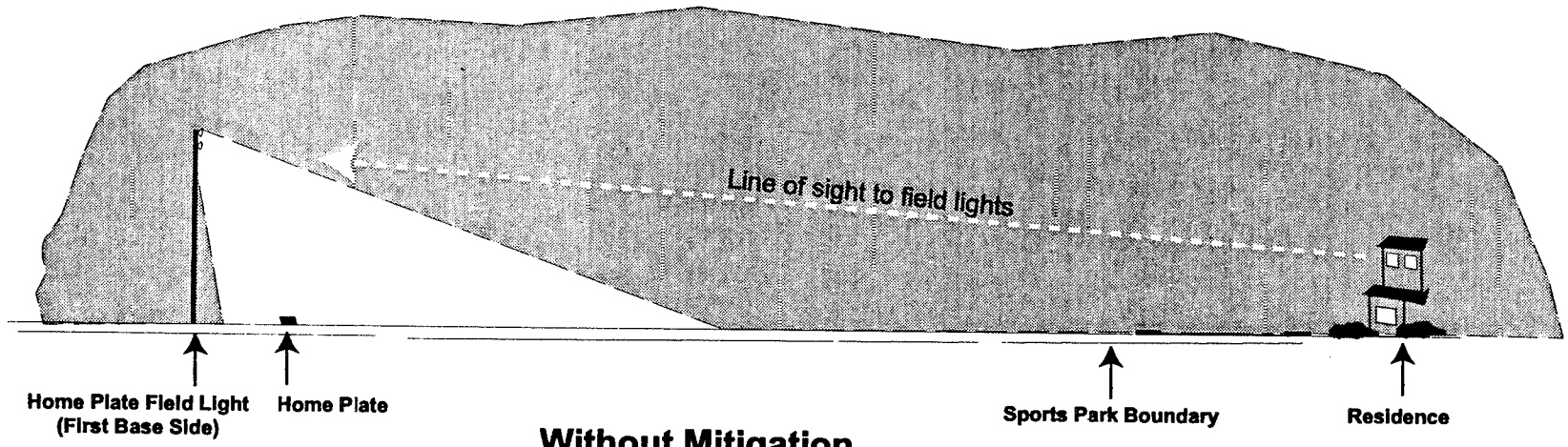
- have a substantial adverse effect on a scenic vista;
- substantially damage scenic resources, including , but not limited to trees, rock outcroppings, and historic buildings;
- substantially degrade the existing visual character or quality of the site and its surroundings; or
- create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Less than Significant Impact–Change in Rural Character. Development of the project site would permanently alter the existing rural character of the area. The view from U.S. Highway 101 would become more urban than it is currently. However, surrounding parcels to the north and east are already developed and the approved sports park will provide an area of transition between the built and rural environments. The change in character brought on by development of the proposed project would be a less than significant impact. No mitigation measure is necessary,

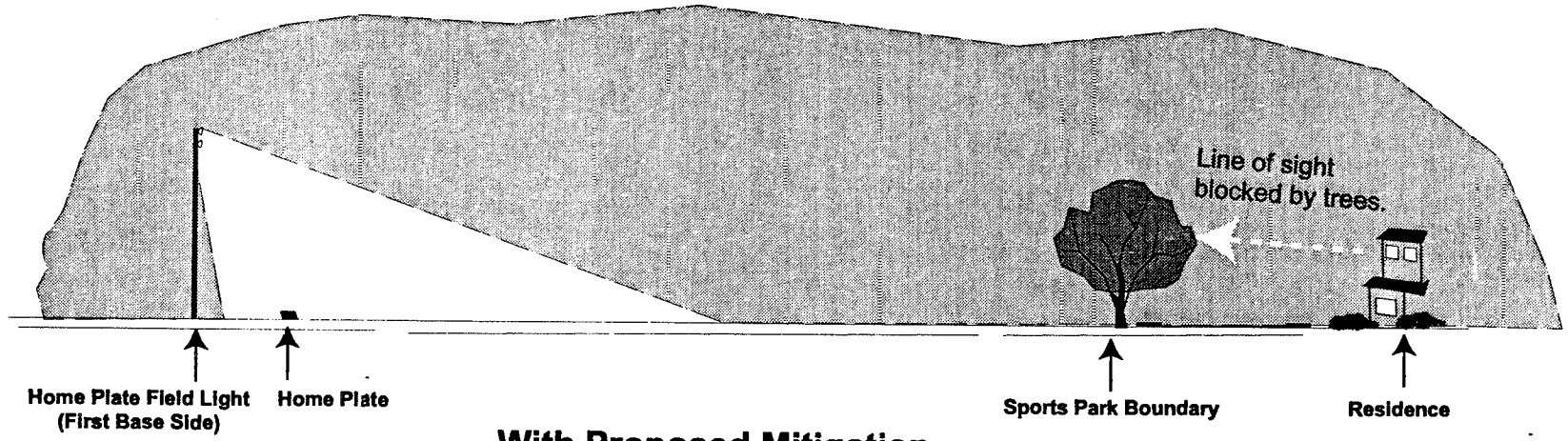
Potentially Significant Impact–Nighttime Lighting. The proposed project would place residences near the planned athletic field lights of the approved Gilroy Sports Park. Several of the planned lights are within 400 to 500 feet of, and aimed towards the nearest homes. These field lights would be directly visible from these houses' windows. This would be a significant adverse impact resulting from light or glare that could effect residents in these homes. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

1. Subject to the review and approval of the City of Gilroy Planning Division, prior to approval of a tentative subdivision map, the applicant for residential development on the parcels north of the sports park shall provide a landscape plan that is consistent with the Gilroy Consolidated Landscape Policy, and includes a double row of trees along the sports park boundary, utilizing tree species that will attain a crown between 30 and 50 feet above street level. One row of trees may be planted on the sports park side of the shared property boundary. The plantings shall be a minimum size of 24-inch boxed specimens and shall be planted prior to occupancy of the houses located within 100 feet of the sports park.



Without Mitigation



With Proposed Mitigation

Note: The illustrated cross-section is shown in plan view on Figure 13.

Source: EMC Planning Group Inc.

Scale: 1" = 50'

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Field Lighting Visibility from Residences

Figure 14

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2.2 Agricultural Resources

Environmental Setting

Existing Uses

The project site comprises 14 parcels with a total land area of 140.21 acres. A total of 128.20 acres is currently farmed with row crops. The flood control levee occupies 7.00 acres, commercial and utility uses occupy 0.8 acres and rural residential, agricultural structures and yards occupy approximately 4.2 acres. The project site also encompasses small undeveloped areas of riparian vegetation along Uvas Creek, on the western periphery. The approved sports park will convert three parcels comprising 78.36 acres of the project site from agricultural land to athletic fields, parking and access areas and ancillary uses.

Surrounding Uses

Land to the south and west of the project site are currently in agriculture. South of and contiguous with the project site is agricultural land bordered by Uvas Creek on its west and south, and Monterey Frontage Road on its east. Greenhouses occupy some of this agricultural land and the remainder is farmed with row crops. West of the project site, across Uvas Creek, is additional agricultural land. Land to the north and east of the project site is developed with urban uses. North of the project site is an established residential neighborhood of single family houses. East of the project site are commercial uses, including hotels, automobile dealership and mini-storage. Park and open space areas are located upstream of the project site along Uvas Creek. A bicycle trail runs along the east bank of Uvas Creek northwest of the project site and will be extended south of the project site as part of the approved sports park project.

Plan Designations

The project site is outside of the existing USA but contiguous with the existing USA on the north and east. The USA is generally expected to accommodate growth for an approximate five-year period. The project site is within the City of Gilroy 20-year planning boundary in the current *Gilroy General Plan* and in the *Draft Gilroy 1999-2020 General Plan*. The 20-year area is an area that is expected to accommodate development within an approximate 20-year timeframe. The project site is designated for agricultural and open space uses in the current *Gilroy General Plan*. The *Draft Gilroy 1999-2020 General Plan* proposes non-agricultural uses on the project site. The project site is outside the Gilroy Agricultural Lands Area.

Soils and Farmland Value

The soil on the project site is Yolo loam. Yolo loam is a well-drained soil underlain by alluvium from sedimentary rock. The soil has high fertility and a very deep effective rooting depth. The soil is categorized as Agricultural Class I and is considered to be the most productive soil in the Santa Clara Valley (United States Department of Agriculture Soil Conservation Service 1974). Class I soils are those that have few limitations that restrict their use.

Approximately 4,140 acres or 0.8 percent of Santa Clara County soils are Yolo loam. In 1974, approximately half of all areas of Yolo loam soil had been used for urban development.

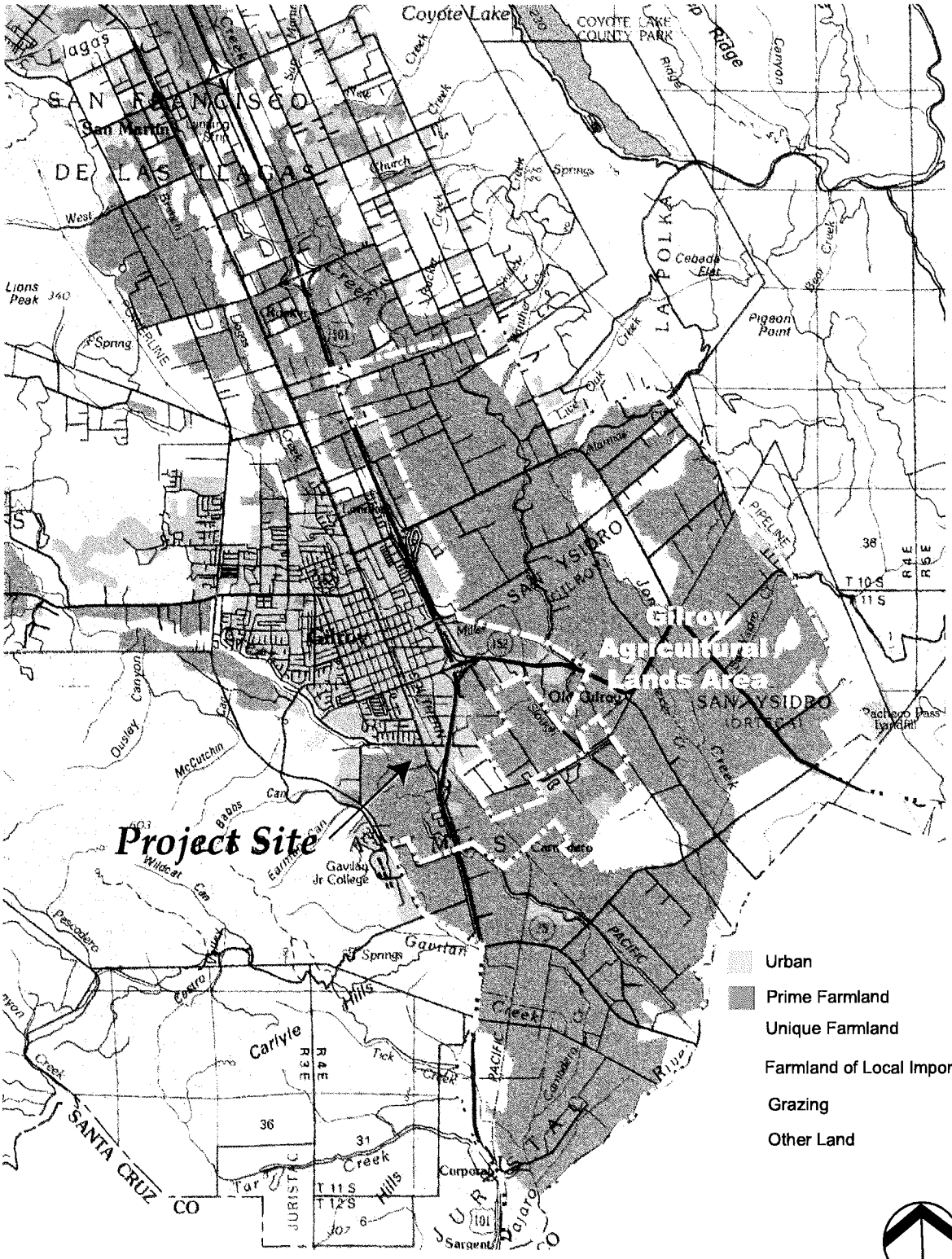
The California Department of Conservation maintains the Farmland Mapping and Monitoring Program. This program qualitatively identifies and keeps an inventory of California farmland. Under this program the project site is classified as prime farmland (California Department of Conservation 1996). Figure 15 shows the Farmland Mapping designations in the project vicinity. Prime farmland is defined by the California Department of Conservation as:

> ...land which has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained yields of crops when treated and managed, including water management, according to current farming methods. *Prime Farmland* must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date. *Prime Farmland* does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

In 1996, Santa Clara County had 33,870 acres of prime farmland. Between 1994 and 1996, 304 acres of prime farmland were converted to other uses in Santa Clara County (California Department of Conservation 1996). Between 1990 and 1994 there were 1,613 acres of prime farmland in Santa Clara County converted to other uses (Santa Clara County 1994). Land taken out of agricultural use for urban development is permanently lost from agricultural production. Urban development leads to lowered efficiency and decreased production on remaining farmland (Crawford, Multari and Star 1995).

Williamson Act Lands

The goal of the California Land Conservation Act of 1965, or Williamson Act, is to retain agricultural land in agricultural use. The act enables local governments to enter into contracts with private landowners to restrict land uses in return for reduced property tax assessments. The California Department of Conservation oversees the program.



Source: Department of Conservation and EMC Planning Group Inc.

Scale: 1" = 1.6 miles

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Gilroy USA Amendment 98-03 Subsequent EIR

Farmland Designations

Figure 15

Williamson Act contracts are for ten-year terms, with automatic renewal each year. A contract may be terminated in several ways. Most commonly, a notice of non-renewal is filed, and the contract ends when the remaining nine years have expired. The tax assessment reductions are gradually phased out over the nine-year period. A contract may be cancelled without the nine-year termination period, but this procedure requires the review and approval of the Department of Conservation and the payment of a cancellation fee equal to 12 percent of the full market value of the property.

Six of the parcels on the project site were under Williamson Act Contract in the past. Notices of non-renewal were filed for parcels 808-21-028, 808-21-029, 808-21-030 and 808-21-031 and the contracts expired effective January 1, 1999. The other two parcels have not been under Williamson Act contract recently (Robert Friedrick, personal communication, February 8, 2000).

Gilroy Agricultural Lands Area

The Gilroy Agricultural Lands Area was established through an agreement between the City of Gilroy, Santa Clara County, and Santa Clara County LAFCO, based on the outcome of the *Study of the South County Agricultural Preserve*. The 15,660-acre area is designated for long-term agricultural use and aims to prevent the encroachment of urban development. The area covers agricultural land east and south of Gilroy, from Buena Vista Road in the north to the Pajaro River and San Benito County line in the south. All but a very small part of the agricultural lands area is located to the east of U.S. Highway 101. The boundaries of the area are shown in Figure 15, presented earlier.

The agricultural lands agreement is meant to support long-term agricultural economic viability and to encourage sustainable future urban development (City of Gilroy et al 1996). The plan directs future growth to areas within a 20-year growth boundary that is consistent with County and City General Plans and remains relatively constant over the long term. Prime farmland is a severely limited and irreplaceable resource. The establishment of the Gilroy Agricultural Lands Area is a partial mitigation for the loss of prime agricultural land in the vicinity of Gilroy.

Project Analysis

The proposed project would add 133.21 acres of prime farmland to the USA of the City of Gilroy. The USA consists of land that is expected to be developed for urban uses within a five-year timeframe. The Gilroy Sports Park has been approved for a 78.36-acre portion of the project site and will be built in phases over an approximate 20-year timeframe. Approval of the sports park on June 7, 1999 will result in the eventual conversion of the sports park site to non-agricultural uses. Approval of the USA amendment would result in the conversion of the remaining 54.85 acres to non-agricultural uses. Approximately five acres of this Prime Farmland is currently built with commercial and rural residential land uses. The proposed new commercial and residential uses would convert 49.85 acres of agricultural land to urban uses.

The proposed project is consistent with the policy of the Gilroy Agricultural Lands Area, which directs new development out of the agricultural lands area and into the 20-year area. Six of the parcels were under Williamson Act contract, but those contracts are no longer in effect. The proposed project is located on land that is adjacent to developed land on the north and east and easily accessed from U.S. Highway 101 and most of the City of Gilroy. The proposed project uses are compatible with existing surrounding commercial, residential, open space and agricultural uses.

Extension of services to the southern parcels on the project site and development of these parcels could result in development pressure on the land south of the project site. Although this area is designated in the *Draft Gilroy 1999-2020 General Plan* as OPEN SPACE, the land owners may request a change in general plan designation to open their land to development. Similar pressures may be felt to the west of Uvas Creek where a less than one-half mile wide finger of land would remain outside the Gilroy USA. All of this land is Prime Farmland.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- convert prime farmland, unique farmland or farmland of statewide importance (as shown on the maps prepared pursuant to the Farmlands Mapping and Monitoring Program of the California Resources Agency) to non-agricultural use;
- conflict with existing zoning for agricultural use or a Williamson Act contract; or
- involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Significant and Unavoidable Impact–Loss of Prime Farmland. Approval of the Urban Service Area amendment and development of parcels adjacent to the sports park site, would result in the loss of 54.85 acres of designated prime farmland. Approximately 49.85 acres of this farmland would be converted from agricultural production. This would be a significant unavoidable adverse environmental impact.

Significant and Unavoidable Impact–Cumulative Project Loss of Prime Farmland. Approval of the Urban Service Area amendment and development of parcels adjacent to the sports park site, in conjunction with development of the approved sports park, would result in the loss of 133.21 acres of designated prime farmland. Approximately 128.21 acres of this farmland would be converted from agricultural production. This would be a significant unavoidable adverse environmental impact.

No Impact–Conflict With Williamson Act Contract. Six of the parcels on the project site were previously under Williamson Act contract. None of these contracts is currently in effect. The parcels most recently in Williamson Act contract were non-

renewed effective in January 1999. Therefore, because these parcels are no longer in Williamson Act contract, there are no additional impacts beyond those identified in the previous two impact statements.

Potentially Significant and Unavoidable Impact–Effect on Adjacent Agricultural Uses. Implementation of the proposed project could induce the adjacent farmland to the south of the project site and nearby farmland to the west of the project site to be converted to non-agricultural uses. These parcels adjacent to the project site are within the proposed City of Gilroy 20-year planning area but are proposed to be designated for open space uses. Development pressures could result in a change of general plan designation and subsequent development.

Mitigation Measures

The loss of prime farmland is generally considered a significant and unavoidable adverse environmental impact. Approval of the USA amendment would result in the probable near-term conversion of prime farmland to non-agricultural uses. The City/County adoption of the Gilroy Agricultural Lands Area serves as regional mitigation for the loss of prime farmland in southern Santa Clara County. Although this regional mitigation has been implemented by both the City of Gilroy and the County of Santa Clara, the conversion of 49.85 acres (128.21 acres cumulative project) of prime farmland in agricultural production could still be considered significant and unavoidable, unable to be mitigated to a less than significant level.

Other measures are potentially available to further mitigate this loss of farmland. Such measures include the establishment of agricultural land conservation easements on currently un-protected farmland that is vulnerable to urban development. Agricultural land may be protected through Williamson Act Contracts and Farm Security Zone Contracts. The addition of an equal area of unprotected farmland to the Gilroy Agricultural Lands Area could be considered as a potential mitigation for the loss of agricultural land.

CEQA Guidelines section 15093(a) requires the decision-making agency (City of Gilroy, as well as the Santa Clara County LAFCo) to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable". Section 15093(b) states that when the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

2.3 Air Quality

Environmental Setting

The City of Gilroy is located within the boundaries of the Bay Area Air Quality Management District (BAAQMD), which encompasses several climatological subregions. The City of Gilroy is located within the subregion known as the Santa Clara Valley.

Climate

The Santa Clara Valley is bounded by the San Francisco Bay to the north and by mountains to the east, south and west. Temperatures are warm on summer days and cool on summer nights, and winter temperatures are fairly mild. At the northern end of the valley, mean maximum temperatures are in the low-80's during the summer and the high-50's during the winter. The mean minimum temperatures range from the high-50's in the summer to the low-40's in the winter. Further inland, where the moderating effect of the bay is not as strong, temperature extremes are greater. For example, in San Martin, located approximately two and one-half miles north of Gilroy, temperatures can be more than ten degrees warmer on summer afternoons and more than ten degrees cooler on winter nights.

Winds in the valley are greatly influenced by the terrain, resulting in a prevailing flow that roughly parallels the valley's northwest-southeast axis. A north-northwesterly sea breeze flows through the valley during the afternoon and early evening, and a light south-southeasterly drainage flow occurs during the late evening and early morning. In the summer, the southern end of the valley (including Gilroy) sometimes becomes a "convergence zone," when air flowing from the Monterey Bay gets channeled northward into the southern end of the valley and meets with the prevailing north-northwesterly winds.

Wind speeds are greatest in the spring and summer and weakest in the fall and winter. Nighttime and early morning hours frequently have calm winds in all seasons, while summer afternoons and evenings are quite breezy. Strong winds are rare, associated mostly with the occasional winter storm.

The air pollution potential of the Santa Clara Valley is high. High summer temperatures, stable air and mountains surrounding the valley combine to promote ozone formation. In addition to the many local sources of pollution, ozone precursors from San Francisco, San Mateo, and Alameda Counties are carried by prevailing winds to the Santa Clara Valley. The valley tends to channel pollutants to the southeast. In addition, on summer days with low level inversions, ozone can be re-circulated by southerly drainage flows in the late evening and early morning and by the prevailing northwesterly winds in the afternoon. A similar re-circulation pattern occurs in the winter, affecting levels of carbon monoxide and particulate matter. This movement of the air up and down the valley increases the impact of the pollutants significantly.

Pollution sources are plentiful and complex in this subregion (Santa Clara Valley). It has a high concentration of industry at the northern end in the "Silicon Valley" area. Some of these industries are sources of air toxics as well as criteria pollutants. In addition, Santa Clara Valley's large population and many work-site destinations generate the highest mobile source emissions of any subregion in the Bay Area (BAAQMD 1996).

Regulatory Framework

Historically, air quality laws and regulations have divided air pollutants into two broad categories of airborne pollutants: "toxic air contaminants" and "criteria pollutants." In general, criteria pollutants are pervasive constituents, such as those emitted in vast quantities by society's use of fossil fuels.

Toxic air contaminants are a category of air pollutants, which are highly toxic in small doses. Toxic air contaminants are only briefly discussed herein because they are generally associated with commercial, industrial and agricultural sources and have been regulated separately from "criteria" pollutants for more than two decades.

Criteria Pollutants. Both the State of California and the federal governments have developed ambient air quality standards for the criteria pollutants, which include ozone, carbon monoxide (CO), nitrogen dioxide (NO_2, sulfur dioxide (SO_2), and suspended particulate matter 10 microns and less (PM_{10}).

Table 3 indicates both federal and state ambient air quality standards for criteria air pollutants. The state standards are relevant for this proposed project and are more stringent than the federal standards. The state standards are not to be equaled or exceeded. When standards are exceeded an "attainment plan" must be prepared which outlines how an air quality district will comply. Generally, these plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods. California also grants air districts explicit statutory authority to adopt indirect source regulations and transportation control measures, including measures to encourage or require the use of ridesharing, flexible work hours, or other measures that reduce the number or length of vehicle trips.

Attainment Status of Air Basin. The BAAQMD lost its designation by the United States Environmental Protection Agency (U.S. EPA) as an attainment area for the national ozone standard on July 10, 1998. The U.S. EPA changed the Bay Area's classification for national 1-hour ozone standard from a "maintenance" area to an "unclassified nonattainment" area. The re-designation action is US EPA's formal recognition that the region has recent violations of the national ambient air quality standard for ozone. The notice requires Bay Area co-lead agencies to prepare a revision to the State Implementation Plan (SIP), a compilation of plans and regulations that govern how the region complies with the Federal Clean Air requirements. In response, the *1999 Ozone Attainment Plan* was adopted by the

BAAQMD in June 1999. The plan presents a strategy for re-establishing an ozone attainment record in the future. The plan contains three elements:

- 1995 Emission Inventory for Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NO_X);
- Assessment of the Emission Reductions Needed to Attain the National Ozone Standard by 2000 (the "Attainment Assessment");
- Control Strategy.

TABLE 3

Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Standard	California Standard
Ozone	8 hour	0.08 ppm	0.09 ppm
Carbon Monoxide	1 hour 8 hour	35.00 ppm 9.00 ppm	20.00 ppm 9.00 ppm
Nitrogen Dioxide	1 hour Annual	— 0.053 ppm	0.25 ppm —
Sulfur Dioxide	1 hour 24 hours Annual	— 0.14 ppm 0.03 ppm	0.25 ppm 0.04 ppm —
Particulates* (PM_{10})	24 hours Annual	150.0 µg/m3 50.0 µg/m^3	50.0 µg/m^3 30.0 µg/m^3
Particulates ($PM_{2.5}$)	24 hours Annual	50.0 µg/m3 15.0 µg/m^3	— —

ppm = parts per million; mg/m^3 = microns per cubic meter

PM_{10} = Particulate matter less than 10 microns in diameter.

$PM_{2.5}$ = Particulate matter less than 2.5 microns in diameter.

* Promulgated in µg/m^3 only.

Source: California Air Resources Board

The BAAQMD estimate of 1995 emissions of VOCs is 562 tons per day (tpd), and for NO_X, 626 tpd. A 128 tpd reduction in VOCs combined with a 92 tpd reduction in NO_X, between 1995 and 2000, would result in an attainment inventory. The Bay Area is expected to achieve the majority of required ozone reductions through 2000 as the result of already enacted regulations. These already adopted regulations

should reduce VOCs by 117 tpd and NO_X by 92 tpd by 2000. This leaves a shortfall for VOCs of 11 tpd, and no shortfall for NO_X. Additional strategies included in the *1999 Ozone Attainment Plan* include control of both stationary and mobile pollutant sources. Stationary sources are typically industrial and commercial uses such as refineries, semiconductor manufacturers and printers. Most mobile source controls involve improved technologies to reduce vehicular emissions. Transportation control measures play an additional minor role in achieving attainment status.

The Bay Area continues to violate the State Ozone Standard. The State one-hour ozone standard, nine parts per hundred million (nine pphm), is considerably more stringent than the national standard of 12 pphm.

The BAAQMD experienced 29 days over the State Ozone Standard and eight days over the Federal Ozone Standard. Out of the past four years, 1998 is the third year of poor air quality recorded in the Bay Area air basin. The BAAQMD maintains an air quality monitoring station in San Martin, north of the proposed project. The San Martin station monitors ozone and carbon monoxide. At this monitoring station, the number of days with maximum one-hour concentration exceeding nine pphm for this year include 15 days when the state threshold was exceeded and three days when the Federal threshold was exceeded. In 1998, the San Martin monitoring station had the most excesses in the Santa Clara Valley region. In 1997, the San Martin monitoring station exceeded the state limit for ozone for 11 days.

Toxic Air Pollutants. Toxic air contaminants are highly toxic in small doses. Examples include certain chlorinated hydrocarbons, certain metals and asbestos. Adverse health effects of toxic air contaminants may be carcinogenic (cancer-causing), short-term (acute) non-carcinogenic, and long-term (chronic) non-carcinogenic. Several hundred such pollutants are currently regulated by various federal, state and local programs.

Toxic air contaminants are generated by a number of sources, including stationary sources, such as dry cleaners, gas stations and laboratories; mobile sources such as automobiles, aircraft, and railroads; natural sources, such as wind blown dust and wildfires; and area sources, such as farms, construction sites, or residential areas.

The regulatory structure that deals with toxic air contaminants includes the National Emission Standards for Hazardous Air Pollutants (NESHAPS), Assembly Bill 1807 (a.k.a., the Tanner Bill) and Assembly Bill 2588 (a.k.a., the Air Toxics "Hot Spots" Information and Assessment Act of 1987).

Health Effects of Pollutants

The primary air quality problems in the air basin are ozone and PM_{10}. The following is a discussion of the health effects of ozone and PM_{10} pollutants.

Ozone. Ozone is produced by chemical reactions, involving NO_X and reactive organic gases (ROG), that are triggered by sunlight. Nitrogen oxides are created during combustion of fuels, while reactive organic gases are emitted during combustion and evaporation of organic solvents. Since ozone is not directly emitted to the atmosphere, but is formed as a result of photochemical reactions, it is considered a secondary pollutant. Ozone is a seasonal problem, occurring roughly from April through October.

Ozone is a strong irritant that attacks the respiratory system, leading to the damage of lung tissue. Asthma, bronchitis and other respiratory ailments, as well as cardio-vascular diseases are aggravated by exposure to ozone. A healthy person exposed to high concentrations may become nauseated or dizzy, may develop a headache or cough, or may experience a burning sensation in the chest. Research has shown that exposure to ozone damages the alveoli (the individual air sacs in the lung where the exchange of oxygen and carbon dioxide between the air and blood takes place). Research has shown that ozone also damages vegetation.

PM_{10}. PM_{10} is suspended particulate matter, 10 microns or less in diameter, that can enter the lungs. The major components of PM_{10} are dust particles, nitrates, and sulfates. PM_{10} is directly emitted to the atmosphere as a byproduct of fuel combustion, wind erosion of soil and unpaved roads, and from fireplaces. Small particles are also created in the atmosphere through chemical reactions. PM_{10} emissions can result from a variety of construction activities, including excavation, grading, demolition, vehicle travel on paved and unpaved surfaces, and vehicle and equipment exhaust. Construction-related emissions can cause substantial increases in localized concentrations of PM_{10}. Particulate emissions from construction activities can lead to adverse health effects as well as nuisance concerns such as reduced visibility and soiling of exposed surfaces (BAAQMD 1996).

Accurate estimates of the PM_{10} concentrations that would occur on or a project site are difficult to obtain because such concentrations are very sensitive to local meteorology, local topography, level of equipment use, and variations in soil and moisture content. However, the U.S. EPA does provide a rough indication of the maximum rate of particulate emissions. Measurements indicate that up to 1.2 tons of dust are emitted per acre per month of construction activity. About 45 percent of this dust is comprised of large particles that settle out rapidly on nearby horizontal surfaces; the remaining 65 percent would be composed of PM_{10}.

Particles greater than 10 microns in diameter can cause irritation in the nose, throat, and bronchial tubes, but do not have long-term heath implications because natural mechanisms in the body remove most of these particles. Particles less than 10 microns in diameter are able to pass through the body's natural defenses and the mucous membranes of the upper respiratory tract and enter into the lungs. The particles can damage the alveoli, tiny air sacs responsible for gas exchange in the lungs. The particles may also carry carcinogens and other toxic compounds, which adhere to the particle surfaces and can enter the lungs. PM_{10} can cause significant health impacts if dust-suppression measures are not implemented.

Project Analysis

Emissions may be the result of construction activities or the result of the operation of the development. For the proposed project the operations emissions are primarily from the operation of motor vehicles going to and from the project site.

Construction Emissions

Construction-related emissions are generally short-term in duration, but may still cause adverse air quality impacts. PM_{10} is the pollutant of greatest concern with respect to construction activities. It is likely that grading and other construction activities associated with construction of the proposed project would result in the emission of PM_{10} in excess of BAAQMD standards.

Operational Emissions

Plan Consistency. According to the *BAAQMD CEQA Guidelines*, general plans, master plans, annexations and similar projects are considered to have a less than significant air quality impact if they are consistent with the *Clean Air Plan*. They are judged for consistency with the *Clean Air Plan* based on use of consistent population projections. According to the *Draft EIR for the City of Gilroy 1999-2000 General Plan* the proposed general plan population projections are consistent with the Association of Bay Area Government 1996 forecast, which was used in developing the 1997 *Clean Air Plan*. Therefore the proposed general plan is consistent with the *Clean Air Plan*. The proposed project is consistent with the proposed general plan, therefore the proposed project is consistent with the *Clean Air Plan* and no cumulative impact results. The approved sports park is also included in the *Draft Gilroy 199-2020 General Plan*, so the build-out of the sports park in conjunction with the proposed project is also consistent with the *Clean Air Plan*.

Air Quality Modeling. For informational purposes the URBEMIS7 air quality modeling program was used to estimate emissions based on vehicle trips generated by the proposed project. URBEMIS7 was developed by the California Air Resources Board (CARB) to determine pollutant emission levels based on traffic generation. The model runs demonstrate the probable emissions that will result from each component of the proposed project. Although the emissions for the commercial component of the proposed project exceed BAAQMD thresholds, the proposed project is not considered to have a significant air quality impact because at the plan level, the proposed USA amendment is consistent with the *Draft Gilroy 1999-2000 General Plan* which in turn is consistent with the *Clean Air Plan.*

The URBEMIS7 air quality modeling program incorporates various assumptions for trip data in the area of the project site, as well as for the proposed project itself. These assumptions include trip generation rates; vehicle fleet mix; trips lengths; average miles per hour; climate; etc. Default values were used in the URBEMIS7 model runs for the proposed project. Separate modeling was conducted for the proposed residential and commercial components of the proposed project. A combined model was run as well. The full results are included in Appendix B.

Residential Operations Emissions. The URBEMIS7 model was run for build-out of the residential area in 2005, based on the conceptual residential plan of 90 single-family homes and 57 triplexes (classified as low-rise condominium units for URBEMIS7 analysis). URBEMIS7 alternative travel mitigations employed in the model run included street lighting, sidewalks, pedestrian connections and bike path access, all of which are expected to be present in the proposed residential development.

Commercial Operations Emissions. The URBEMIS7 model was run for commercial build-out in 2010. The URBEMIS7 street lighting mitigation was employed.

Total Proposed Project Operations Emissions. The URBEMIS7 model was run for proposed project build-out in 2010. The same respective URBEMIS7 mitigations were assumed in the model run for each proposed land use.

The results of the air quality modeling are summarized in Table 4. Emissions exceed BAAQMD project-level standards for the commercial component and for the proposed project as a whole. As stated above, annexations and similar projects are considered to have a less than significant air quality impact if they are consistent with the *Clean Air Plan*. The proposed project is consistent with the *Clean Air Plan*.

TABLE 4

Projected Project Air Quality Impacts – URBEMIS7 Modeling Results (Pounds Per Day)

	ROG	NOx	CO
BAAQMD Thresholds	**80.00**	**80.00**	**550.00**
Proposed Residential 2002 (Winter)	24.28	31.45	219.48
Proposed Residential 2002 (Summer)	16.88	27.78	38.22
Proposed Commercial 2010 (Winter)	140.91	206.14	1,304.52
Proposed Commercial 2010 (Summer)	96.98	180.49	789.78
Project Build-out 2010 (Winter)	157.33	233.08	1,462.90
Project Build-out 2010 (Summer)	109.40	204.67	894.08

Source: EMC Planning Group Inc. and BAAQMD

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- cause a violation of any air quality standard or contribute substantially to an existing or projected air quality violation;

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

- expose sensitive receptors to substantial pollutant concentrations.

Less than Significant Impact – Proposed Project Operations. BAAQMD determines the thresholds of significance for general plans, master plans annexations and similar projects based on the project's consistency with the *Clean Air Plan*. The proposed project is consistent with the *Draft Gilroy 1999-2020 General Plan*, which is in turn consistent with the *Clean Air Plan*. Therefore the proposed project is consistent with the *Clean Air Plan* and would have a less than significant impact on air quality.

Potentially Significant Impact – Project Construction. The BAAQMD's approach to CEQA analysis of construction-related air quality impacts is to emphasize the implementation of effective and comprehensive control measures rather than detailed quantification of emissions. The BAAQMD has identified a set of feasible control measures for construction emissions of PM_{10}. These control measures are applicable to construction sites that are large in area, and located near sensitive receptors, i.e., residential neighborhoods. The proposed project is located close to residential areas. Lack of feasible construction dust control measures could result in a significant adverse air quality impact due to construction activities. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

2. The following dust control measures shall be incorporated into all permits for any phase of proposed construction on the project site. The measures shall be implemented as necessary to adequately control dust subject to the review and approval of the City of Gilroy Planning Division.

   The following measures shall be implemented at all construction sites:

   - Water all active construction areas at least twice daily;

   - 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.

The following additional measures shall be implemented at construction sites greater than four acres in area:

- 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 mph;
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways;
- Replant vegetation in disturbed areas as quickly as possible.

Subject to determination by the Gilroy Planning Division the following measures shall be implemented at construction sites that are very large or are located near sensitive receptors:

- Install wheel washers for all existing trucks, or wash off the tires or tracks of all trucks and equipment leaving the site;
- Install wind breaks, or plant trees/vegetative wind breaks at windward side(s) of construction areas;
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 miles per hour;
- Limit the area subject to excavation, grading and other construction activity at any one time.

2.4 Biological Resources

Environmental Setting

A reconnaissance-level biological survey was conducted by LSA Associates, Inc. in January 1993 to identify biological resources occurring or potentially occurring on the project site, including vegetation types, significant wildlife habitat features, and the potential for the presence of special-status plant and animal species. The project site was resurveyed by a biologist from EMC Planning Group Inc. in November 1998 to field-check and update the 1993 biological survey. The following discussion includes information contained in the 1993 biological survey and updated information provided by the 1998 survey.

Habitats observed in the project site include agricultural land, Uvas Creek and associated riparian woodland habitat, and landscape plants associated with existing and former residences. Figure 16 illustrates the habitat types observed on the project site.

The following discussion describes those plant and animal species that were observed during the 1993 and/or 1998 survey, or that would be expected to commonly occur in habitats present on the project site.

Agricultural. The majority of the project site is in agricultural row crop production and does not contain naturally-occurring plant species.

Due to continuous human interaction, agricultural fields typically provide little habitat for wildlife. No bird species were observed foraging in the agricultural land; however, turkey vulture (*Cathartes aura*), American crow (*Corvus brachyrhynchos*), and gulls (*Larus* spp.) were observed flying over the field. Crows and songbirds may forage in the cultivated fields and small mammals (e.g. pocket gophers, ground squirrels, and black-tailed hares) may also forage and burrow in the fields assuming they are not actively controlled in the area. Larger mammals such as coyotes and foxes may also utilize cultivated fields for hunting and foraging but are not likely to inhabit these areas.

Uvas Creek. Uvas Creek, and the associated riparian woodland habitat (described below), is the most significant biological resource on the project site. Willows (*Salix* spp.) and mugwort (*Artemisia douglasiana*) are the most common shrubs along the border of the creek channel. Annual grasses and forbs grow in the creek channel in the dry season. Vegetation in the channel is subject to removal by increased flow during the rainy season. There are no wetlands or waters of the United States on the project site other than Uvas Creek and associated temporary pools in the creek channel. Adult steelhead (*Oncorhynchus mykiss irideus*), a federally threatened species (discussed further below), is known to migrate upstream in Uvas Creek to spawn in winter and early spring. They rest in pools and spawn in shallow riffles. Other native and introduced fish, crayfish, and bullfrogs have been reported from the Uvas Creek Preserve upstream of the project site.

Riparian Woodland. A narrow riparian corridor with an average width estimated to be approximately 25 feet from the centerline of Uvas Creek to the edge of canopy borders each side of the creek, although riparian vegetation is absent in some areas along the creek. A dirt road used for the adjacent agricultural operations is located along the entire edge of the riparian corridor. The riparian corridor supports a diversity of vegetation and provides valuable wildlife habitat. The dominant plant species in this corridor include mature western sycamore trees (*Platanus racemosa*), coast live oak (*Quercus agrifolia*) and valley oak (*Quercus lobata*), Fremont's cottonwood (*Populus fremontii*), willow thickets, and California blackberry (*Rubus ursinus*). Eucalyptus (*Eucalyptus* spp.), black walnut (*Juglans hindsii*) and English walnut (*Juglans regia*) are occasional components of the riparian vegetation on the project site. Riparian woodland habitat is protected by the California Department of Fish and Game (discussed further below).

Open areas in the riparian woodland habitat, the edge between riparian woodland habitat and the agricultural field, and the levee in the northwest portion of the project site are dominated by non-native annual grasses and forbs. Common species include oat (*Avena* spp.), ripgut brome (*Bromus diandrus*), thistles (*Centaurea solstitialis, Cirsium vulgare, Silybum marianum*), mallow (*Malva* spp.), and mustards (*Brassica* spp.).

The large oak and sycamore trees provide excellent roost and nesting sites for raptors and other bird species, and the continuous tree canopy contributes to its value as a corridor for wildlife. White-crowned sparrows (*Zonotrichia leucophrys*), yellow-rumped warblers (*Dendroica coronata*), bushtits (*Psaltriparus minimus*), scrub jays (*Aphelocoma coerulescens*), black phoebe (*Sayornis nigricans*), and northern flickers (*Colaptes auratus*) were observed in the riparian vegetation between the agricultural fields and Uvas Creek. Holes drilled by red-breasted sapsucker (*Sphyrapicus ruber*) were observed in the trunks of riparian trees. A red-shouldered hawk (*Buteo lineatus*) was observed in the riparian woodland south of Farman Lane south of the project site, and red-tailed hawk (*Buteo jamaicensis*), sharp-shinned hawk (*Accipiter striatus*), and American kestrel (*Falco sparverius*) were seen in the riparian woodland on the project site.

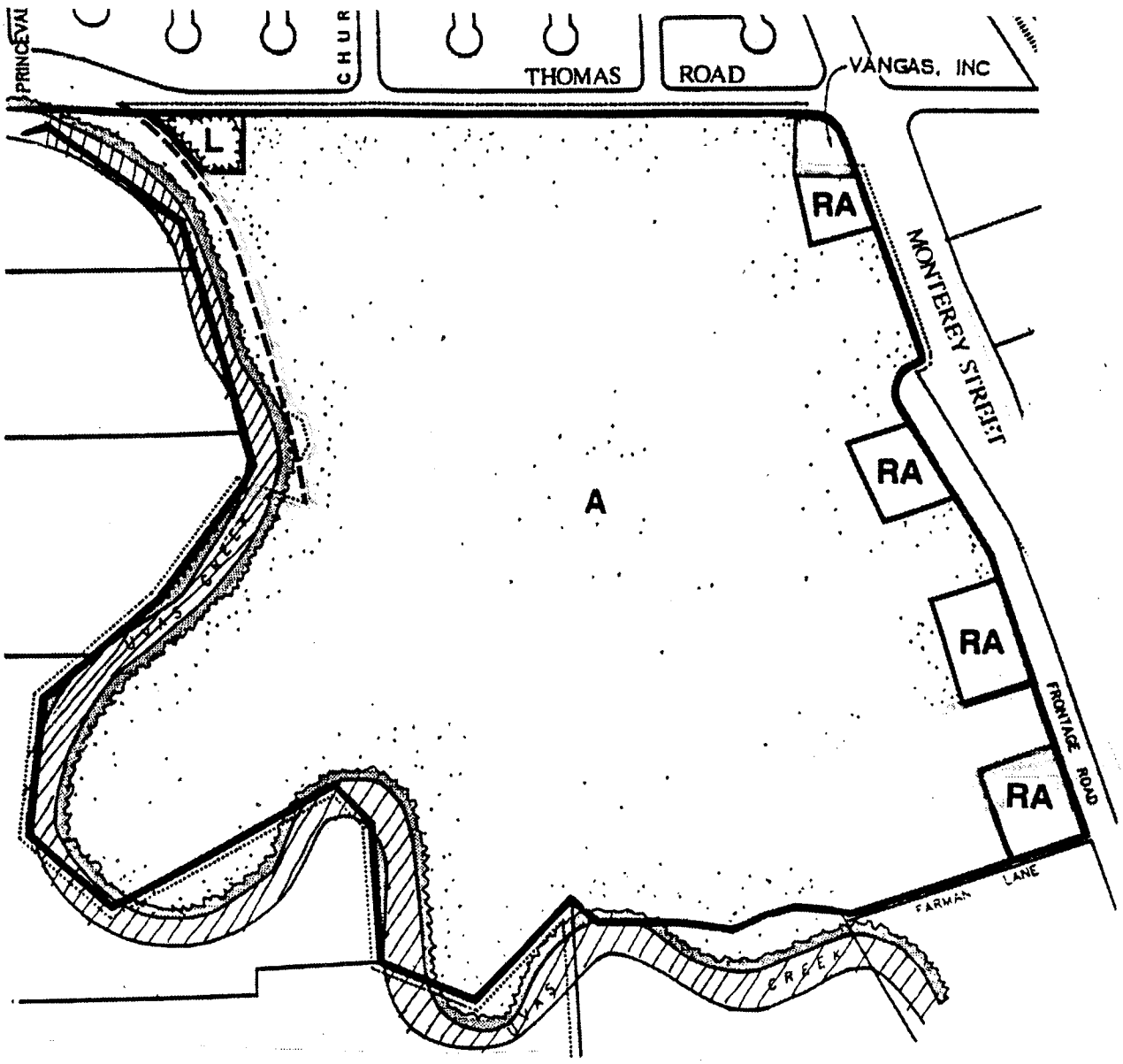
Grasses and forbs in the riparian understory harbor insects and provide seed and nesting material for sparrows, finches, and small mammals. Botta's pocket gopher (*Thomomys bottae*) burrows were observed in loose soil among non-native grasses bordering the levee.

Landscape Trees. In the northwest corner of the project site, mature landscape plantings of trees and shrubs persist around a former home site. Tree species in this area consist of incense cedar (*Calocedrus decurrens*), eucalyptus, pepper tree (*Schinus molle*), coast redwood (*Sequoia sempervirens*), and California fan palm (*Washingtonia filifera*). Along the eastern project site boundary of Monterey Frontage Road, houses, outbuildings, and associated landscape plantings alternate with cultivated fields.

The mature landscape trees in the north corner of the project site provide a food source for birds, squirrels, and other small mammals. The large trees provide perching and nesting sites close to Uvas Creek and a source of food for resident and migratory birds.

Special-Status Species

Data from the U. S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), California Department of Fish and Game (CDFG), and California Native Plant Society (CNPS), as well as local knowledge and the 1993 biological survey report, were reviewed to determine the potential for any special-status species to occur in any areas associated with the proposed project. Special-status species include species listed or proposed for listing by the USFWS, NMFS, CDFG, and/or CNPS as endangered, threatened, or species of special concern."



Legend

- Proposed Boundary of USA Amendment Request
- Riparian Vegetation
- Levee Road

- **A** Agriculture
- **L** Landscape Trees
- **RA** Residence and Agriculture

Source: LSA Associates and EMC Planning Group Inc.

Scale: 1" = 250'

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy USA Amendment 98-03 Subsequent EIR

Habitat Types

Figure 16

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Special-status species that have the potential to be found on the project site are listed in Table 5, along with their legal status and habitat requirements. This list was determined by evaluating the geographic ranges and habitat requirements of each species and habitat conditions at the project site.

TABLE 5

Potential Special-Status Species

Species	Status (Federal/State/CNPS)	Habitat
Plants:		
None	--	--
Wildlife:		
California tiger salamander *Ambystoma californiense*	Candidate/CSC	Grassland with seasonal water source
Western spadefoot toad *Scaphiopus hammondii*	FSC/CSC	Upland areas with seasonal water source
Foothill yellow-legged frog *Rana boylii*	FSC/CSC	Upland areas associated with rock-bottomed creeks
California red-legged frog *Rana aurora draytonii*	FT(USFWS)/CSC	Lowlands/foothills near permanent deep water sources
Western pond turtle *Clemmys marmorata*	FSC/CSC	Aquatic habitat
Steelhead *Oncorhynchus mykiss irideus*	FT(NMFS)/--	Aquatic habitat
Burrowing owl *Athene cunicularia*	FSC/CSC	Nests and winters in small mammal burrows in grasslands
Nesting raptors/active raptor nests	--/CSC	Tall trees in woodland areas

FT(USFWS): Listed as "Threatened" by the USFWS.
FT(NMFS): Listed as "Threatened" by the NMFS.
Candidate: A candidate for listing as threatened or endangered by the USFWS.
FSC: USFWS "Special Concern". Prior to February 1996, the USFWS identified these species as "Category 2" candidates for listing (taxa for which information in the possession of the USFWS indicated that proposing to list as endangered or threatened was possibly appropriate, but for which sufficient data on biological vulnerability and threat were not currently available to support proposed rules). The designation of Category 2 species as candidates resulted in confusion about the conservation status of these taxa. To reduce that confusion, and to clarify that the USFWS does not regard these species as candidates for listing, the USFWS has discontinued the designation of Category 2 species as candidates. The USFWS remains concerned about these species, but further biological research and field study are needed to resolve the conservation status of these taxa.

CSC: CDFG "Species of Special Concern". The CDFG "Species of Special Concern" does not afford these species any federal or state protection. These species should be taken into special consideration when decisions are made concerning the future of any land parcel. A species is included as a "Species of Special Concern" when their breeding populations in California are declining. Species are also included that are not declining worldwide, but in California the population is so low that it is potentially vulnerable to extirpation.

Source: USFWS and CDFG

Plants. The CDFG Natural Diversity Database (Chittenden and Gilroy quadrangles) reports three special-status native plant species occurring within the vicinity of the project site, including Metcalf canyon jewelflower (*Streptanthus albidus* ssp. *albidus*), most beautiful jewelflower (*Streptanthus albidus* ssp. *peramoenus*), and Santa Clara Valley dudleya (*Dudleya setchellii*). These plant species are restricted to serpentine soils. Since serpentine soils are not present on the project site, and since natural conditions on the project site have been disturbed by long-term agricultural use, it would be extremely unlikely that any of these species would occur on the site.

Wildlife. The CDFG Natural Diversity Database (Chittenden and Gilroy quadrangles) reports several special-status animal species occurring within the vicinity of the project site, including California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana aurora draytonii*), western pond turtle (*Clemmys marmorata*), burrowing owl (*Athene cunicularia*), bank swallow (*Riparia riparia*), and tricolored blackbird (*Agelaius tricolor*). In addition, steelhead are known to migrate in Uvas Creek, and raptor nests could potentially be present in the riparian woodland trees on the project site. Other species not listed on the Natural Diversity Database that have the potential to occur on the project site include western spadefoot toad(*Scaphiopus hammondii*) and foothill yellow-legged frog (*Rana boylii*).

Of those species listed on the Natural Diversity Database reports, bank swallow and tricolored blackbird most likely do not occur on the project site. Bank swallows require vertical banks or cliffs with fine-textured sandy soils to dig a nesting hole. The portion of Uvas Creek that occurs on the project site does not contain appropriate habitat for nesting bank swallows. Likewise, tricolored blackbirds typically nest in colonies in marshes or other open water areas, and no appropriate habitat for tricolored blackbirds occurs on the project site.

Also, while not listed on the Natural Diversity Database reports, the project site was evaluated for potential use by other special-status species, including San Joaquin whipsnake (*Masticophus flagellum ruddocki*), pallid bat (*Antrozous pallidus*), and Townsend's western big-eared bat (*Corynorhinus townsendii townsendii*). These species most likely do not occur on the project site. San Joaquin whipsnakes are found in grassland habitats, and pallid and Townsend's western big-eared bats are found in deserts, pine forests and canyons with roost sites (caves, cliff overhangs and buildings). No appropriate habitat for these species occurs on the project site.

The potential occurrence of the other species listed on the Natural Diversity Database (NDDB) reports is discussed below.

- *California tiger salamander.* The California tiger salamander is a candidate for listing as threatened or endangered by the USFWS, and is designated as a "Species of Special Concern" by the CDFG. Tiger salamanders primarily occur in valley floor and foothill grasslands. Adults utilize rodent burrows for refuge during the non-breeding season and, during the rainy season, they migrate to aquatic breeding sites, such as seasonal ponds, reservoirs, lakes, and occasionally stream pools.

  No California tiger salamanders were observed on the project site during the 1993 and 1998 field surveys. The NDDB lists known occurrences of California tiger salamanders near Tick Creek (four miles south of Gilroy), near the intersections of Castro Valley Road and Old Monterey Street with U.S. Highway 101 (three and four miles south of Gilroy, respectively), and in Farman Canyon pond and Reservoir Canyon Pond on the O'Connell Ranch in Gilroy (approximately 2.5 miles south of the project site). Breeding habitat for the California tiger salamander is potentially present in pools adjacent to the Uvas Creek bed. However, it would be highly unlikely that they would occur on the majority of the project site due to the long history of agricultural disturbance.

- *Western spadefoot toad.* The western spadefoot toad is designated as a "Species of Special Concern" by the USFWS and CDFG. Western spadefoot toads primarily occur in upland areas near aquatic breeding sites, such as seasonal ponds, reservoirs, lakes, and stream pools.

  No western spadefoot toads were observed on the project site during the 1993 and 1998 field surveys, and the NDDB does not contain any listings of occurrences of western spadefoot in the project vicinity. However, western spadefoot habitat is potentially present in pools adjacent to the Uvas Creek bed. However, it would be highly unlikely that they would occur on the majority of the project site due to the long history of agricultural disturbance.

- *Foothill yellow-legged frog.* The foothill yellow-legged frog is designated as a "Species of Special Concern" by the USFWS and CDFG. Foothill yellow-legged frogs primarily occur in upland areas near rock-bottomed creek breeding sites.

  No foothill yellow-legged frogs were observed on the project site during the 1993 and 1998 field surveys, and the NDDB does not contain any listings of occurrences of foothill yellow-legged frogs in the project vicinity. However, foothill yellow-legged frog habitat is potentially present in Uvas Creek. However, it would be highly unlikely that they would occur on the majority of the project site due to the long history of agricultural disturbance.

- *California red-legged frog.* The California red-legged frog is listed as threatened by the USFWS, and is designated as a "Species of Special Concern" by the CDFG. California red-legged frogs occur in different habitats depending on their life stage and the season. All life history stages are most likely to be encountered in and around breeding sites, which include many aquatic habitats, such as ponded and backwater portions of streams. Creeks and ponds where California red-legged frogs are found often have dense growths of woody riparian vegetation, especially willows. The presence of this kind of vegetation is an important indicator that the site may provide foraging or breeding habitat for California red-legged frogs.

  No California red-legged frogs were observed on the project site during the 1993 and 1998 field surveys. The NDDB lists known occurrences of red-legged frogs along Tick Creek (three to four miles south of Gilroy), near the intersection of Old Monterey Street with U.S. Highway 101 (four miles south of Gilroy), and along the Pajaro River near the U.S. Highway 101/25 interchange (four miles southeast of Gilroy). California red-legged frogs may potentially occur and breed in seasonal pools in the Uvas Creek channel, and may potentially disperse to the adjacent riparian woodland after the end of the rainy season. However, it would be highly unlikely that they would occur on the majority of the project site due to the long history of agricultural disturbance.

- *Western pond turtle.* The western pond turtle is designated as a "Species of Special Concern" by the USFWS and CDFG. Western pond turtles are aquatic turtles that live in ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. They need basking sites and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.

  No western pond turtles were observed on the project site during the 1993 and 1998 field surveys, and the NDDB does not contain any listings of occurrences of western pond turtles in the project vicinity . Western pond turtles are potentially present in Uvas Creek Preserve north of the project site. Western pond turtle habitat is potentially present in pools adjacent to the Uvas Creek bed. However, it would be highly unlikely that they would occur on the majority of the project site due to the long history of agricultural disturbance.

- *Steelhead.* Steelhead is listed as threatened by the NMFS but is given no special status by the CDFG. Steelhead spend the first few years of their lives in fresh water before migrating to the ocean. They return to their spawning grounds as adults to breed.

  Steelhead are known to migrate and spawn in gravel areas in Uvas Creek.

- *Burrowing owl.* The burrowing owl is designated as a "Species of Special Concern" by the USFWS and CDFG. Burrowing owls nest and winter in burrows in the ground, especially in abandoned ground squirrel burrows. Optimal habitat conditions include large, open grasslands or prairies.

  No burrowing owls were observed on the project site during the 1993 and 1998 field surveys, and no California ground squirrels (*Spermophilus beecheyi*) or their burrows were observed during the field surveys. The NDDB lists known occurrences of burrowing owls along the Pajaro River near the U.S. Highway 101/State Highway 25 interchange (four miles southeast of Gilroy). Potential owl habitat exists along the slope of the levee in the northwest corner of the site.

- *Raptor nests.* Nesting raptors and active raptor nests (i.e., nests in which raptors are breeding or raising young) are protected by the CDFG. Raptors, including white-tailed kite, northern harrier, Cooper's hawk, and short-eared owl, could potentially maintain active raptor nests in the riparian woodland habitat on the project site during the breeding season.

Project Analysis

Development of the proposed project would result in the conversion of active agricultural fields into urban uses such as housing and shopping centers. The existing agricultural fields do not represent a significant biological resource since the fields do not provide habitat for naturally occurring plants and provide only marginal habitat for wildlife. Residential construction would occur near the levee and Uvas Creek. Besides its proximity to sensitive riparian habitat this area has been identified as potential burrowing owl habitat.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

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

- 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;

- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (i.e., the City of Gilroy Consolidated Landscape Policy); and/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.

No Impact–Loss of Habitat. The proposed project would not result in the loss of valuable wildlife habitat. Due to continuous human interaction, active agricultural fields typically provide little habitat for wildlife and do not represent a significant biological resource. No mitigation is required.

Potentially Significant Impact–Invasive Plant Species. The existing riparian habitat along Uvas Creek and the planned habitat buffer are sensitive areas that could be affected by the presence of non-native, invasive plant species. Any deterioration of habitat quality caused by the introduction of non-native, invasive plant species into the riparian habitat and/or buffer would be a potentially significant impact. Landscaped streetscape areas shown in the conceptual residential plan would adjoin the Uvas Creek riparian corridor and could result in the introduction of non-native, invasive plant species. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

3. A landscape plan consistent with the Gilroy Consolidated Landscape Policy shall be prepared for common and street side planting areas areas abutting the Uvas Creek habitat corridor, subject to the review and approval of the City of Gilroy Planning Division. The landscape plan shall include appropriate native plant species and shall not include plantings of non-native, invasive plant species. Native grasses or other native species shall be preferred in the areas adjacent to the Uvas Creek levee to provide additional native habitat in association with the Uvas Creek habitat corridor.

Potentially Significant Impact–Raptors. The riparian woodland habitat found along Uvas Creek contains potential nesting habitat for raptors, including white-tailed kite, northern harrier, Cooper's hawk, and short-eared owl, which are protected by the CDFG. Should active raptor nests occur in the area proposed for development (i.e., trail and bridge construction through the riparian corridor), any construction and site preparation activities within or immediately adjacent to nest habitat, if conducted during the nesting season, could result in the direct loss of nests, including eggs and young, or the abandonment of an active nest by the adults. Depending on the number and extent of raptor nests on the site that may be disturbed or removed, the loss of active raptor nests would be a potentially significant impact. Implementation of the mitigation measure presented above

requiring a qualified biologist to inform construction workers of the potential presence of special-status species, and the following mitigation measure will reduce this impact to a less than significant level.

Mitigation Measure

4. Subject to the review of the City of Gilroy Planning Division, no earlier than 45 days and no later than 20 days prior to commencement of clearing, grading or construction in or adjacent to any riparian habitat, a field survey shall be conducted by a qualified biologist to determine if active raptor nests are present in the construction zone or within 250 feet of the construction zone. These surveys shall be required only if any construction would occur during the nesting and/or breeding season of raptors potentially nesting in the areas proposed for development (generally March 1 through August 1). If active nests are found within the survey area, at the discretion of the biologist, clearing and construction within 250 feet shall be postponed or halted until the nests are vacated and juveniles have fledged and there is no evidence of a second attempt at nesting.

Potentially Significant Impact–Burrowing Owls. Potential burrowing owl habitat exists along the slope of the levee in the northwest corner of the project site. Residential development, trail connections and landscaping would occur on and near the levee. Should active burrowing owl nests occur along the slope of the levee, any construction and site preparation activities within or immediately adjacent to nest habitat, if conducted during the nesting season, could result in the direct loss of nests, including eggs and young, or the abandonment of an active nest by the adults. Depending on the number and extent of burrowing owl nests on the site that may be disturbed or removed, the loss of active burrowing owl nests would be a potentially significant impact. Implementation of the following mitigation measure will reduce this impact to a less than significant level.

Mitigation Measure

5. Subject to the review of the City of Gilroy Planning Division, no earlier than 45 days and no later than 20 days prior to commencement of grading or construction on or adjacent to the slope of the levee, field surveys shall be conducted at least four consecutive evenings by a qualified biologist to determine if burrowing owls are present in the construction zone or within 250 feet of the construction zone. These surveys shall be required only if any construction would occur during the nesting and/or breeding season of burrowing owls potentially nesting in the area (February 1 through August 31) and/or during the winter residency period (December 1 and January 31). Pre-construction survey results shall be submitted to the California Department of Fish and Game for review and approval. If active nests are found within the survey area, a burrowing owl habitat mitigation plan shall be submitted to the California Department of Fish and Game for review and

approval. The burrowing owl habitat mitigation plan shall contain mitigation measures contained in the California Department of Fish and Game Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 1995). Compliance with this mitigation measure may include, but not be limited to, the following:

- Avoidance of occupied burrows during the nesting season (February 1 through August 31);
- Acquisition, protection and funding for long-term management and monitoring of foraging habitat adjacent to occupied habitat;
- Enhancement of existing burrows and/or creation of new burrows;
- Passive relocation of burrowing owls.

Potentially Significant Impact–Riparian Special-Status Species. Several special-status species may potentially occur in Uvas Creek and in the riparian habitat adjacent to Uvas Creek. Any adverse effects on these special-status species, if present, resulting from construction activities associated with the residential area adjacent to the riparian habitat would be a significant impact. Implementation of the following mitigation measures would reduce this potential impact to a less than significant level.

Mitigation Measures

6. Prior to commencement of construction activities, the city shall arrange for a qualified biologist to inform workers of the potential presence of the all special-status species, their protected status, work boundaries, and measures to be implemented to avoid loss of these species during construction activities.

7. All food-related trash items shall be enclosed in sealed containers and regularly removed from the project area to deter attraction of potential predators of the California red-legged frog, foothill yellow-legged frog, western spadefoot toad, California tiger salamander, and western pond turtle. Pets shall not be allowed on the construction site. The proper location of the trash containers shall be subject to the review and approval of the City of Gilroy Community Development Department.

Potentially Significant Impact–Effects of Nighttime Lighting on Wildlife. Nighttime lighting of roads adjacent to Uvas Creek in the proposed residential area could spill over into the riparian woodland habitat and could potentially disturb wildlife species occurring in the riparian habitat, restrict the movement or activity of wildlife species in the riparian habitat, or facilitate increased predation of wildlife species, which could potentially include special-status species. Restricted movement of wildlife species and increased predation of special-status species occurring as a

result of increased levels of nighttime light would be a potentially significant impact. Implementation of the following mitigation measure will reduce this impact to a less than significant level.

Mitigation Measure

8. Subject to the review and approval of the City of Gilroy Planning Division, luminaires in the proposed residential area shall be limited in height to 20 feet and shall be of a full cutoff design to reduce light spillage to adjacent areas. Luminaires located along a street adjacent to the Uvas Creek levee shall be located to the east side of the street.

2.5 Cultural Resources

A cultural resources evaluation of the sports park site and levee was conducted by Archaeological Resource Management in October 1998. A cultural resources evaluation of the remaining 54.85 acres of the project site was conducted by Archaeological Resource Management in December 1999. At the request of the California Historical Resources Information System, Northwest Information Center, the reports are not available for public review. California Government Code Section 6254.10 exempts archaeological site information from the California Public Records Act, which requires that public records be open to public inspection. The following discussion is based on the cultural resources evaluations.

Environmental Setting

Methodology

A preliminary archaeological investigation was conducted consisting of an archival search and surface reconnaissance. The archival search was conducted at the Northwest Information Center of the Archaeological Site Inventory. This task is completed to discover any archaeological sites or surveys that have been recorded within a half-mile radius of the subject area. Each archival search within the State is given a file number for verification. The surface reconnaissance of the project site was conducted by a field archaeologist to determine if traces of historic or prehistoric materials exist within the study area. The archaeologist looks for early ceramics, Native American cooking debris, and artifacts of stone, bone and shell. For historic cultural resources, the field evaluation also considers older structures, distinctive architecture, and subsurface historic trash deposits of potentially significant antiquity.

Regional Setting and Historic Resources

The project site is located along the banks of Uvas Creek, in an alluvial area of the Santa Clara Valley. These alluvial areas are known to contain many buried prehistoric resources.

Archival research located several historic and prehistoric sites located in the vicinity of the project site. A circa 1952 bungalow was reported by Caltrans in 1992. Archival records indicate that the house is located partially on the project site, but field investigation showed the house to be immediately south of the project site. Two additional reported historic sites and two prehistoric sites were found to be located within one half mile of the project site.

Historic Resources on the Project Site

The archival search found one recorded historic site located on the project site. Field reconnaissance revealed four additional potentially historic buildings on the project site.

No structures remain at the recorded site located in the northwest corner of the project site in an area with a proposed RESIDENTIAL – NEIGHBORHOOD DISTRICT general plan designation. A small wooden cabin that was built in the 1850's once occupied the site and was still occupied as late as 1974 when it was recorded in a report to the California Archaeological Site Inventory.

The December 1999 field investigation found four houses on the project site to be potentially historic for the California Register of Historic Places. These homes are all located along the eastern border of the project site. Several other houses and commercial buildings on the project site were not considered to be potentially historic. The potentially historic houses are listed below.

6235 Monterey Street. A small simple Queen Anne Victorian house with a water tower is located at his address. The estimated date of construction is between 1880 and 1910. The house has a bay window with gable, featuring some ornamental detailing. The roof is pyramidal-hipped with a lower cross gable over the bay window. There is an early addition to the back of the house.

6065 Monterey Frontage Road. A small simple Queen Anne Victorian house with a water tower and garage is located at this address. It is estimated to date from between 1880 and 1910. The house has a bay window with some ornamental detailing and twin side-gabled windows. The house has a hipped roof. The original wood siding has been replaced with stucco. The garage appears to have been built later.

5985 Monterey Frontage Road. A Craftsmen house with a garage and other out buildings is located at this address. The house is estimated to have been built between 1905 and 1930. The house has a side-gabled roof and stucco exterior walls. The porch features stucco pillars and a decorative geometric railing.

5885 Monterey Frontage Road. Several structures are located at this address. A Craftsmen house with a hipped roof is estimated to date from 1905 to 1930. The house has shiplap siding and a partially enclosed porch. Another house and out buildings at this address did not appear to have potential historic significance.

Prehistoric Resources

The surface reconnaissance was conducted by a field archaeologist. No prehistoric cultural resources were observed. While no reported or recorded prehistoric archaeological sites were found on the project site, two such sites were found to be located within one half mile of the project site. These consist of shells, mortars and other related artifacts, and are currently buried.

Project Analysis

Construction of the proposed residential and commercial development would involve the use of heavy equipment for grading, trenching and construction activities. It is possible that buried prehistoric or historic cultural resources would be discovered during these activities.

It is probable that future development plans would include the removal of the potentially historic houses located along the eastern edge of the project site.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines section 15064.5;
- cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5;
- directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; and/or
- disturb any human remains, including those interred outside of formal cemeteries.

Potentially Significant Impact–Historic Houses. Background research and a field reconnaissance conducted by Archaeological Resource Management in December 1999 indicates that the project site contains four potentially historic houses. These houses are likely to be removed to accommodate future development on the project site. The houses may also have significant buried historic resources associated with them. Loss or disturbance of these houses and any associated historic resources is a potentially significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

9. Prior to removal of any of the potentially historic houses on the project site an historical evaluation shall be completed. The historic evaluation shall include an architectural description of the structure, an historic background for the property and the completion of an appropriate State Department of Parks and Recreation form with photographic documentation.

Potentially Significant Impact–Buried Cultural Resources Background research and a field reconnaissance conducted by Archaeological Resource Management indicates that the project area may contain buried and unknown significant cultural resources. The Santa Clara Valley is known to be rich in buried prehistoric resources, especially the alluvial soils found near waterways. Therefore, due to the proposed project's location in a creek-side environment and the presence of a recorded historic resource directly adjacent to the trail extension, there is an elevated chance that currently unidentified buried cultural resources may be found during construction on the project site. Disturbance of prehistoric or historic cultural resources would be considered a significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measures

10. The developers for any portion of the project site shall contract with a qualified archaeologist to arrange a schedule for monitoring during grading and excavation activities due to the project site's creek-side location and proximity to recorded historic and prehistoric sites.

11. Due to the possibility that significant buried cultural resources might be found during construction the following language shall be included any permits issued for the project site, including, but not limited to building permits for future development, subject to the review and approval of the Gilroy Planning Division:

    If archaeological resources or human remains are discovered during construction, work shall be halted at a minimum of 200 feet from the find and the area shall be staked off. The project developer shall notify a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented.

12. In the event of an accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall ensure that this language is included in all permits in accordance with CEQA Guidelines section 15064.5(e):

> If human remains are found during construction there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of Santa Clara County is contacted to determine that no investigation of the cause of death is required. If the coroner determines the remains to be Native American the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code Section 5097.98. The landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if: a) the Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission; b) the descendent identified fails to make a recommendation; or c) the landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

2.6 Geology

Environmental Setting

Regional Seismicity

The project site is located within the seismically-active Santa Clara Valley. The project site is located approximately four miles southwest of the Calaveras fault, three miles northeast of the Sargent fault, and seven miles northeast of the San Andreas fault. These three faults are active and considered capable of producing severe ground shaking events.

Maximum earthquakes capable of occurring under existing known geologic conditions are 8.5 on the Richter scale for the San Andreas fault, 7.5 for the Calaveras fault, and 7.0 for the Sargent fault. It is estimated that an earthquake of magnitude 8.5 on the San Andreas fault has a recurrence interval of 100 to 1,000 years, although it is unknown when the last magnitude 8.5 earthquake occurred on the San Andreas fault. Similarly, a lesser recurrence interval would exist for an earthquake of smaller magnitude.

The Loma Prieta earthquake, which occurred on October 17, 1989, measured 7.1 on the Richter scale and was centered approximately 18 miles northwest Gilroy. The earthquake caused moderate to severe damage to structures in the City of Gilroy.

According to the Association of Bay Area Governments (ABAG) the project site would experience "moderately high" shaking amplification in the event of a major earthquake (ABAG 1995).

Soils Characteristics

The project site is composed primarily of Yolo loam and Yolo silty clay loam. A small portion of the project site (within the Uvas Creek channel) is Riverwash.

The majority of the project site is Yolo loam, extending from Uvas Creek to near the eastern edge of the project site at the north and all the way to Monterey Frontage Road at the south. This soil is found on alluvial plains and fans. The capability rating of the soil is I-1, indicating that it has very few limitations that restrict its use. The soil has a moderate shrink-swell potential and low corrosivity to un-coated steel. The *Santa Clara County Relative Seismic Stability Map* designates this portion of the project site E-1, meaning that it has a moderate potential for liquefaction.

The eastern edge of the project site is Yolo silty clay loam, encompassing a narrow area of the proposed residential area and most of the proposed commercial area north of the park access road. This soil is found on alluvial plains and fans. The capability rating of the soil is I-1, indicating that it has very few limitations that restrict its use. The soil has a moderate shrink-swell potential and low corrosivity to un-coated steel. The *Santa Clara County Relative Seismic Stability Map* designates this portion of the project site F-1, meaning that it has a low potential for liquefaction.

Project Analysis

Based on historic records and on the known seismicity of the area, it is likely that the project site will experience an earthquake of magnitude 6.0 or greater within the next 50 years, as well as numerous smaller earthquakes, all generated within 20 miles of the project site. In the event of a strong earthquake centered along any of the nearby faults, ground shaking at the site will likely be moderate to high.

Residential and commercial buildings would be constructed on the project site. As a condition of the building permit all buildings would be required to be built to the

standards of the most current edition of the *Uniform Building Code*. Buildings built in compliance with the *Uniform Building Code* and current engineering standards should substantially resist damage from most earthquakes and minimize death or injury to occupants. The project site is level and the soils on the project site do not limit its potential for the construction of buildings. The project site has moderate shrink-swell potential and low to moderate liquefaction potential.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it 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; or
  - ◊ landslides;
- result in a substantial soil erosion or the loss of topsoil;
- be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- be located on an expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Less Than Significant Impact–Seismic Hazards. The proposed project presents a small risk of exposing people or structures to potential substantial adverse effects involving seismic hazards. This risk is associated with all potential structures on the project site. The *Draft Gilroy 1999-2020 General Plan* Policy 25-03 requires appropriate studies for all developments to assess potential hazards and assure that they are adequately mitigated. Additionally all structures would be built to the standards of the latest version of the *Uniform Building Code*, and to current engineering standards. Therefore the proposed project would have a less than significant impact in terms of geologic hazards, and no mitigation measures are necessary.

2.7 Hydrology and Flooding

Environmental Setting

A hydrology and drainage report was conducted for substantially the same project site in January 1993 by Cregan and D'angelo. Background information on the Uvas Creek watershed is contained in the U.S. Army Corps of Engineers feasibility study of the Uvas Creek levee (U.S. Army Corps of Engineers 1981). A hydrology study was conducted for the approved sports park by Schaaf and Wheeler in May 1999. This section is based on information contained in those reports. These three documents are available for review at the City of Gilroy Planning Division office. Water supply and demand are discussed in Section 2.12 Water Supply.

Regional Setting

Uvas Creek is part of the Uvas-Carnadero Creek drainage basin, which includes the major tributaries of Little Uvas Creek, Little Arthur Creek and Bodfish Creek. The drainage encompasses approximately 90 square miles.

Uvas Dam, constructed in 1958, is approximately 11 miles upstream of the project site. Little Uvas Creek feeds the Uvas Reservoir, which is impounded behind the dam. A levee on the north and east of Uvas Creek was built in 1991, and extends approximately 5,600 feet, including approximately 1,800 feet on the project site. Downstream of U.S. Highway 101 (and approximately three-quarters of a mile south of the project site) Uvas Creek becomes known as Carnadero Creek, until it flows into the Pajaro River. The Pajaro River flows into Monterey Bay near Watsonville. The width of the Uvas Creek channel varies widely, from four feet wide to over 600 feet wide. In the vicinity of the project site the channel is approximately 100 to 150 feet across bank top to bank top, and very deep.

Major streams subject to flooding in southern Santa Clara County are the Pajaro River, Llagas Creek, Uvas Creek and their tributaries. A one-percent flood in southern Santa Clara County would inundate approximately 14,800 acres (County of Santa Clara 1986). The greatest recorded flood on Uvas Creek occurred in 1986. The estimated peak flow rate for that event was 14,500 cubic feet per second (cfs), even with the attenuating effects of Uvas Dam.

Storm Water Run-off and Flooding

In undeveloped areas, a large proportion of rainfall is absorbed into the soil before storm water begins to run off into streams. The percentage of storm water that percolates into the soil depends on a number of factors including slope, soil cover (e.g., vegetation) soil type, existing level of saturation and intensity of rainfall. Developed areas contain many surfaces, such as streets and buildings that are impervious to water. When rainfall lands on these surfaces, it drains on the surface and eventually into a drainage pipe or watercourse. Essentially none of the storm water that hits impervious surfaces is absorbed into the surfaces on which it falls.

The difference in run-off between pervious and impervious surfaces varies depending on conditions. Those factors noted above that influence percolation into pervious surfaces affect the relative run-off rates between pervious and impervious surfaces. Under low rainfall conditions, or if the soil is not saturated, a very high proportion of rainfall infiltrates a pervious surface and there is very little surface run-off. As the soil becomes saturated or the rainfall intensifies, a higher proportion of the water runs off from pervious surfaces and the difference between run-off from pervious and impervious surfaces can become quite small.

Water flows are not constant along the length of a stream. Following major rainfall, the water level will peak at some point along the stream and the peak flow will move downstream. Flooding occurs when the flow rate exceeds the capacity of the watercourse. The timing of storm water run-off is critical to the effect it will have on flood levels. Storm water that runs off into a watercourse while flood level flows are passing will contribute to flooding. Water that flows into a watercourse outside of flood stage flows, either before or after flood flows pass, will generally not contribute to the flooding.

Project Site Setting

The project site is currently undeveloped farmland with a general slope away from Uvas Creek towards Monterey Street. The project site is situated on an alluvial fan or cone. Uvas Creek has cut a "perched" channel through the alluvial cone. The remaining parts of the alluvial fan have retained their natural slope, resulting in the situation on the project site of land sloping away from rather than towards the creek.

Storm water flows across the surface of the project site. Run-off that drains off the project site flows to Monterey Street and via a storm drain into Uvas Creek near U.S. Highway 101. With implementation of the sports park project, approximately half of the project site will be drained by a system of storm drains. Most of the sports park drainage will flow into a new outfall to Uvas Creek at the southeast corner of the project site. The sports park access road drainage will flow out to Monterey Street. The sports park drainage system is designed to drain ten-year storm waters from the site. The sports park has been designed to accommodate flooding from greater than ten-year storms. The parking areas at the sports park will generally be lower than the existing grade to act as ponding areas during floods. Ponding in the paved parking areas will allow for silt that settles out of the floodwaters to be easily removed after the water has drained away. The parking areas are designed to retain floodwater in ten-year or larger storm events. After grading for the sports park is completed, 100-year flood levels at surrounding parcels will be equal to or lower than current levels.

The U.S. Army Corps of Engineers constructed a flood-control levee adjacent to a portion of the project site in 1990. The levee runs along the eastern side of Uvas Creek south from West Luchessa Avenue for approximately 1,800 feet. This levee protects the northern portion of the project site, as well as residential areas to the north of the project site from flooding during 100-year floods. The Santa Clara

Valley Water District (SCVWD) has jurisdiction over Uvas Creek and owns the levee on the east of Uvas Creek. SCVWD holds a flood flowage easement that restricts land use and development on a large portion of the sports park site and a small portion of the areas proposed for RESIDENTIAL – NEIGHBORHOOD DISTRICT and COMMERCIAL – GENERAL SERVICES general plan designations. The flood flowage easement encompasses land that was calculated to suffer induced flooding due to the construction of the Uvas Creek levee, that is, flooding to a greater extent than would have been expected prior to the construction of the levee. Approximately 49 acres of the project site are within the flowage easement. Most of this area is within the sports park site. Approximately one-half acre each of the residential and commercial areas are within the flood flowage easement. Uses within the flowage easement are restricted to open space uses that will not inhibit the flow of floodwaters across the land.

The Federal Emergency Management Agency (FEMA) estimated 100-year flow rate for Uvas Creek is 14,000 cfs upstream of West Luchessa Avenue, and 8,300 cfs at U.S. Highway 101. Downstream of the levee, approximately 1,740 cfs would overflow Uvas Creek in a southeasterly direction into the project site during a 100-year flood flow. Near the southeast corner of the sports park site, 2,900 cfs would overflow in a northeasterly direction onto the project site during a 100-year flood flow (Schaaf and Wheeler 1999).

Most of the project site is within a FEMA-designated flood zone (FEMA 1998). Only the southern-most portions of the sports park are located outside of a FEMA-designated flood zone, and classified as Zone C by FEMA. Approximately 18 acres of land in the northern portion of the project site is classified by FEMA as Zone X. Areas that are subject to flooding less than one foot in depth by 100-year floods, or are protected by a levee from 100-year floods, or are subject to flooding by a 500-year flood are classified by FEMA as Zone X. A 500-year flood is defined as a flood that has a two-tenths of a percent chance of occurring in a given year or once on average in 500 years. Zone X areas can be developed with permanent structures subject to the review and approval of the City of Gilroy. The Zone X flood area on the project site includes most of the area designated RESIDENTIAL - NEIGHBORHOOD DISTRICT in the *Draft Gilroy 1999-2020 General Plan*.

The remainder of the project site is classified by FEMA as Zone A. Areas subject to 100-year flooding are classified by FEMA as Zone A. 100-year floods or "one-percent floods" are defined as floods that have a one percent chance of occurring in a given year, or once on average in 100 years. Areas outside the flowage easement but within the 100-year flood zone are subject to restrictions as outlined in the *City of Gilroy Floodplain Ordinance*. Permanent structures in these areas must have their lowest floor elevation at least one foot above the 100-year flood elevation as indicated on the *FEMA Flood Rate Insurance Maps*. In addition to most of the sports park, the Zone A areas encompass the areas designated COMMERCIAL - GENERAL SERVICES and the eastern-most portion of the area designated RESIDENTIAL - NEIGHBORHOOD DISTRICT. FEMA flood zone designations on the project site are illustrated in Figure 17.

The sports park hydrology study prepared by Schaaf and Wheeler in May 1999 encompassed all but the northern-most portions of the project site. It used more detailed topography than the studies used in preparation of the FEMA maps and because of this shows levels of flooding different from those of the FEMA maps. Most of the proposed residential area is located outside the 100-year flood zone. The southeastern corner of the proposed residential area is within the 100-year flood zone. Most of the proposed commercial area is within a 25-year flood zone, with 25-year flood levels estimated to be below one foot. 50-year flood levels may exceed one foot in places and 100-year flood levels could be as high as three and one-half feet. The *Gilroy Sports Park Hydrology Study* final sports park hydrology model flood levels are illustrated in Figure 18.

Storm Water Quality

A variety of contaminants are common to urban area storm water and irrigation run-off. These contaminants include coliform bacteria, sediment, organic chemicals, nutrients and pesticides from landscaping and athletic fields, and fuel constituents, heavy metals, oil and grease from automobiles, roads and parking areas.

Water quality degradation is regulated by the Federal National Pollution Discharge Elimination System (NPDES) Program, which was established by the Clean Water Act. The NPDES controls and reduces pollutants to water bodies from point and non-point discharges. In California, the California Regional Water Quality Control Boards (RWQCB) administer the 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 one acre of land during construction are required to file a notice of intent to be covered under the State NPDES General Construction Permit for discharges of storm water associated with construction activities. The applicant must propose control measures that are consistent with the State NPDES General Construction Permit and consistent with recommendations and policies of the local agency and the RWQCB.

The State NPDES General Construction Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site 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.

The SCVWD also requires a project review and permit for any construction that takes place within 50 feet of any watercourse within its boundaries.

The SCVWD encourages projects that may potentially effect water quality to conform with the principles and practices outlined in a pair of water quality manuals: "Start at the Source, Design Guidance Manual for Storm Water Quality Protection," prepared by the Bay Area Storm Water Management Agencies Association and "Parking Lot Best Management Practices Manual," prepared by the Santa Clara Valley Urban Run-off Pollution Prevention Program. These manuals address post-construction water quality protection through the incorporation of appropriate project design and best management practices.

Project Analysis

Storm Water Run-off

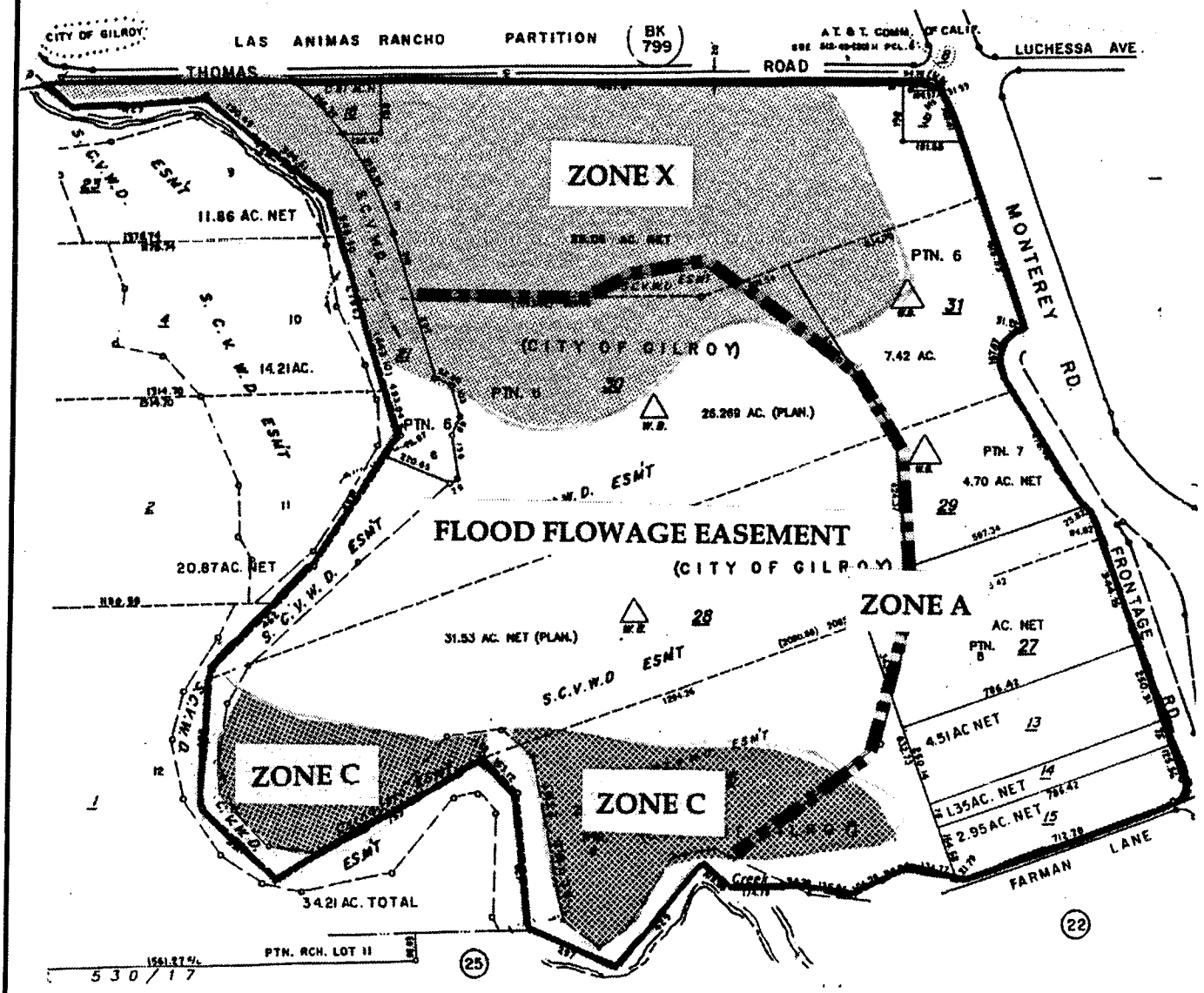
The proposed project would include landscaped areas, access roads, parking lots, pathways and structures. Storm water run-off from these impervious surfaces may increase the rate of storm water discharge to Uvas Creek and the Pajaro River watershed from the project site. The increase in storm water run-off is generally greatest for small rainfall events. During small rainfall events the rainfall has the greatest potential for surface storage and infiltration into the soil. With pervious surfaces this potential is high, while with impervious surfaces this potential is low. For individual sites, the peak run-off may also be increased by the construction of a storm drain system, which reduces the time for flow to discharge to the creek or stream.

For large flood events, the potential increase in run-off due to impervious surface area is generally much smaller. The surface storage and soil infiltration capacity are filled early in large storms and the soil is generally saturated at the time of the peak rainfall. Therefore run-off is relatively equal during most of a large storm event regardless of the permeability of the surface. For large watersheds such as Uvas Creek, the peak flood flow generally occurs hours after the peak rainfall.

For Uvas Creek, the downstream channel generally has capacity for low flows up to approximately the 10-year flood event. Therefore, increased flooding from small storm events would not occur. For larger flood events, greater than the 10-year flood, the potential change in project site run-off would be relatively small and would not have a significant effect on the peak flood flow rates and flooding from Uvas Creek.

On-site Flood Water Flowage

The SCVWD flood flowage easement imposes use restrictions on most of the sports park site and a portion of two other parcels on the project site. The flood flowage easement restricts usage of the sports park site during winter months, particularly during potential flood conditions. The sports park was designed to accommodate flood flows.



Source: FEMA 1998 Flood Rate Insurance Map and EMC Planning Group Inc.

Scale: 1" = 400'

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FEMA Flood Zone Designations

Figure 17

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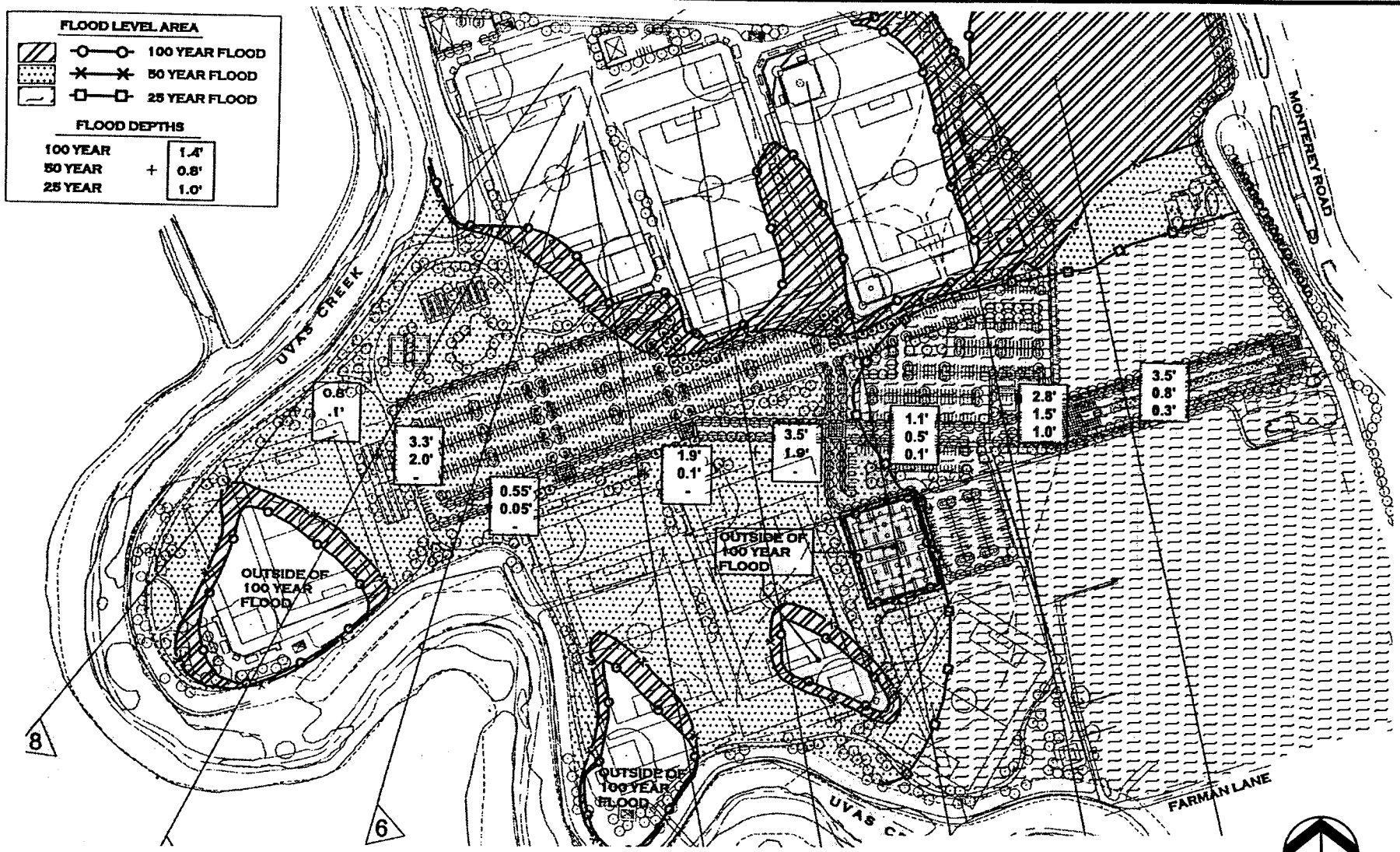

Modeled flood levels with completion of sports park grading plan

Source: Schaaf & Wheeler

Scale: 1" = 300'

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Sports Park Hydrology Model

Figure 18

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Small portions of the proposed residential area, and proposed commercial area fall within the flood flowage easement. The area of proposed residential development that is within the flood flowage easement is located in FEMA Zone X, in which a building is normally permitted with minimal flood precautions. The proposed commercial development that is within the flood flowage easement is located in FEMA Zone A, in which the lowest floor is normally required to be one foot above the 100-year flood elevation as indicated on the *FEMA Flood Rate Insurance Maps*. No structures or other features that would block or alter the flood flow would be allowed in this flood flowage easement area. The conceptual residential plan indicates a park and private front yards within the easement.

The southeastern most corner of the proposed residential area is within the 100-year flood zone. Depths of flooding in this area are less than one foot and site grading or filling would be necessary in this area. Most of the proposed commercial area is within a 25-year flood zone, and is subject to flooding of between one and three and one-half feet during 100-year floods. Portions of the proposed commercial area could be built up to elevations higher than the 100-year flood level, however, it is not feasible to raise a substantial portion of the proposed commercial area due to the need to retain potential floodwaters on-site. A detailed hydrological study would be required to determine that no induced off-site flooding would occur due to grading or construction on the proposed commercial area.

Storm Water Quality

Urban contaminants from the proposed project could be transported to the drainage system, polluting downstream water systems. The potential for contamination exists during both the construction and operation of the proposed project. Siltation ponds and contaminant filters may be required to prevent urban pollutants from reaching Uvas Creek.

Portions of the proposed project would involve grading and paving within the flood flowage easement or within 50 feet of the Uvas Creek levee. SCVWD will review construction plans for any proposed development within the flood flowage easement to assure that proposed development will not have any detrimental effects on watercourses, habitat or animals. A SCVWD permit may be required for some of the construction work at the project site.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- violate any water quality standards or waste discharge requirements;
- substantially alter the existing drainage pattern of the site or area, including through the alteration of a stream or river;

- substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-site or off-site;

- create or contribute runoff water that would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or

- place within a 100-year flood hazard area structures that would impede or redirect flood flows.

Less Than Significant Impact–Increased Flood Flows in Uvas Creek. The proposed project would include the construction of access roads, parking lots, pathways and structures, which add new impervious materials to the project site. Storm water run-off from these impervious surfaces could increase the rate of storm water discharge into Uvas Creek and the Pajaro River drainage. However, during flood conditions it is likely that the increase in run-off due the new impervious surfaces at the project site would be less than significant.

Potentially Significant Impact–On-Site Flooding. The proposed commercial area and portions of the proposed residential area are within 100-year flood zones as identified on the FEMA maps. The Gilroy Floodplain Control Ordinance allows development within 100-year floodplains provided certain measures are taken to prevent potential damage from flooding. Portions of the commercial area are within a 25-year flood zone based on a hydrology study conducted for the sports park. Development within these areas prone to flooding presents potential risks to health and safety of people and damage to buildings and property. This is a potentially significant impact.

Mitigation Measure

13. Any applicant for development within FEMA-delineated 100-year flood zones on the project site shall have a hydrology report prepared for that development by a qualified hydrologist or engineer, to specify hydrology-related design requirements for the site and buildings, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to issuance of a building permit. The hydrology report shall address the following requirements:

    - Site plans and building designs shall comply with the City of Gilroy Flood Plain Control Ordinance.

    - Development on the project site shall not impede the flow of floodwaters.

- Procedures shall be developed and site plans designed that will assure that any materials, supplies or goods used, stored or hold for sale at the proposed use that may present health hazards or risks of water contamination during flood conditions are securely kept at least one foot above the 100-year flood level.

- Development on the project site shall not result in an increase in floodwater levels off the project site.

Calculations for both the 25-year and 100-year flood events shall be submitted in support of these requirements. All grading, design or other recommendations of the hydrology report shall be incorporated into project plans.

Potentially Significant Secondary Impact–Off-Site Flooding. The proposed commercial area and portions of the proposed residential area are within 100-year flood zones as identified on the FEMA maps. The Gilroy Floodplain Ordinance allows development within 100-year floodplains provided certain conditions are met, including elevating the first floor elevations to at least one foot above the 100-year flood elevation. Construction within the floodplain could potentially result in diversion of floodwaters and increases in flood levels off the project site. This would be a significant environmental impact. Implementation of a mitigation measure presented earlier that would require project-specific hydrology studies when specific development proposals are submitted would reduce this impact to a less than significant level.

Potentially Significant Impact–Flood Flowage Easement. SCVWD holds a flood flowage easement that restricts land use and development on a large portion of the project site. Inappropriate development within this easement could put structures at risk of damage and people at risk of injury or death from storm-related flooding. Structures within the flood flowage easement could impede the flow of floodwaters and result in additional flooding in adjacent areas. The flood flowage easement is contained almost entirely within the sports park site. Drainage plans and site design for the approved sports park have accounted for flood flows within this easement. Portions of the proposed residential and commercial areas are within the flood flowage easement. Construction in this area may have impacts on the flow of floodwaters that could potentially have impacts both on- and off-site. Implementation of a mitigation measure presented earlier that would require project-specific hydrology studies when specific development proposals are submitted would reduce this impact to a less than significant level.

Significant Impact–Surface Water Quality During Construction. During construction, grading would expose sediments to rain or wind erosion and subsequent transportation of sediments to the Uvas Creek, Pajaro River and Monterey Bay. The silt load that could be generated could degrade the quality of

Existing Noise Levels

Existing noise levels at the project site are primarily from traffic on adjacent roads. Principal noise sources identified in the noise study were U.S. Highway 101, Monterey Street and Monterey Frontage Road. Additional noise sources include semi-trucks, barking dogs and general household activity from farm residences along Monterey Frontage Road and Farman Lane. New noise sources will come into existence with the development of the sports park.

Existing noise levels were measured at two locations, using continuous recordings over two separate 24-hour periods from October 29 to October 31, 1998. The noise study found an existing noise level 63 dB_{DNL} at the intersection of Monterey Frontage Road and the sports park access road. Noise levels along the remainder of Monterey Frontage Road can be assumed to be similar. At the sports park site boundary with the proposed commercial area (420 feet east of the centerline) the existing noise level is 52 dB_{DNL}. Noise levels are of course higher near the noise source and lower farther from the noise source.

Project Analysis

Ambient Noise Effects on Residential and Commercial Uses

The noise study bases its project impacts analysis on projected noise levels at project build-out in 2020.

Project traffic study projections for 2020 were used to estimate future noise levels from traffic on Monterey Street and Monterey Frontage Road. The noise study concludes that noise increases on these streets will be approximately 0.4 dB and 0.2 dB respectively. Future noise levels from traffic on U.S. Highway 101 were based on estimates made for the update of the *Santa Clara County General Plan* in 1994. Noise generated by traffic on U.S. Highway 101 was estimated to increase by approximately 3 dB by 2020.

The ambient noise level in 2020 is projected to be approximately 56 dBA_{DNL} at the sports park site boundary with the proposed commercial area (420 feet east of the centerline). This level is well within the standards of the *City of Gilroy General Plan* for all land uses. The ambient noise level in 2020 at the entry point to the sports park access road is projected to be approximately 67 dBA_{DNL}. It can be assumed that the noise level would be similar along all of Monterey Frontage Road and Monterey Road. With build-out of the general plan, West Luchessa Avenue would be a six-lane arterial adjacent to the project site. Noise levels along this portion of West Luchessa Avenue could be expected to be similar to those projected for the Monterey Road and Monterey Frontage Road areas of the project site. These noise levels exceed the city standards for both residential and commercial uses, though at locations somewhat farther from the roads, the noise levels may be within the standards for commercial uses.

Long-term Sports Park Noise Effects on Residential and Commercial Uses

Access Road Noise. The sports park site is accessed from Monterey Frontage Road by a 600 foot long access road, designed to carry two lanes of traffic into and one lane of traffic out of the sports park. The average weekend traffic along the access road at sports park build-out is projected to be 5,700 trips. Assuming an average speed of 25 miles per hour, the 60 dBA_{DNL} contour would be approximately 40 feet from the access road centerline. Noise levels would be within the City standard of 65 dBA_{DNL} for commercial areas. No residential development would be located near the access road. Therefore there would be no significant noise impacts from access road traffic.

Athletic Events Noise. Since the sports park is not yet built, noise levels from athletic events is based on previous acoustical studies of athletic event sound levels. These sound levels include noise from athletic activity, crowds and public address systems. Table 6 lists typical noise levels from the types of athletic events expected to be held at the proposed sports park.

TABLE 6

Athletic Event Noise Exposure

Event Type	dBA_{DNL}	Distance from Source
Youth Soccer	51	260 feet
Youth Baseball	51	260 feet
Adult Softball	50	260 feet
Roller Skating	55	60 feet

Note: Source locations are at the center of the soccer field and roller skating area, and home plate on the baseball and softball fields.

Source: Edward L. Pack Associates, Inc.

For purposes of projecting maximum future noise exposure from the proposed sports park, the noise study analyzed four different athletic event scenarios. The worst case scenario involved all 13 baseball fields running competitions simultaneously from 9:00 AM until 10:00 PM. Games were analyzed as lasting last one hour each with a 15-minute break between games. Both skating areas were assumed to be in continuous use from 10:00 AM until 6:00 PM under this scenario.

Other sports park uses are of low intensity and would not contribute significantly to the overall noise levels at the proposed sports park. These activities, which include bocci ball, volleyball, horseshoes and a playground, were omitted from the noise study scenarios.

Projected noise exposure levels were calculated for four different locations (three commercial and one residential). These locations are illustrated in Figure 19. The noise exposure at each of these locations under each scenario is summarized in Table 7. As presented in the Table, the sports park generated noise exposure will comply with City standards at the proposed commercial uses. The sports park-generated noise will exceed City standards at the proposed residential area north of the sports park under the scenarios involving constant baseball and softball playing.

TABLE 7

Projected Noise Exposure from Athletic Events (dBA_{DNL})

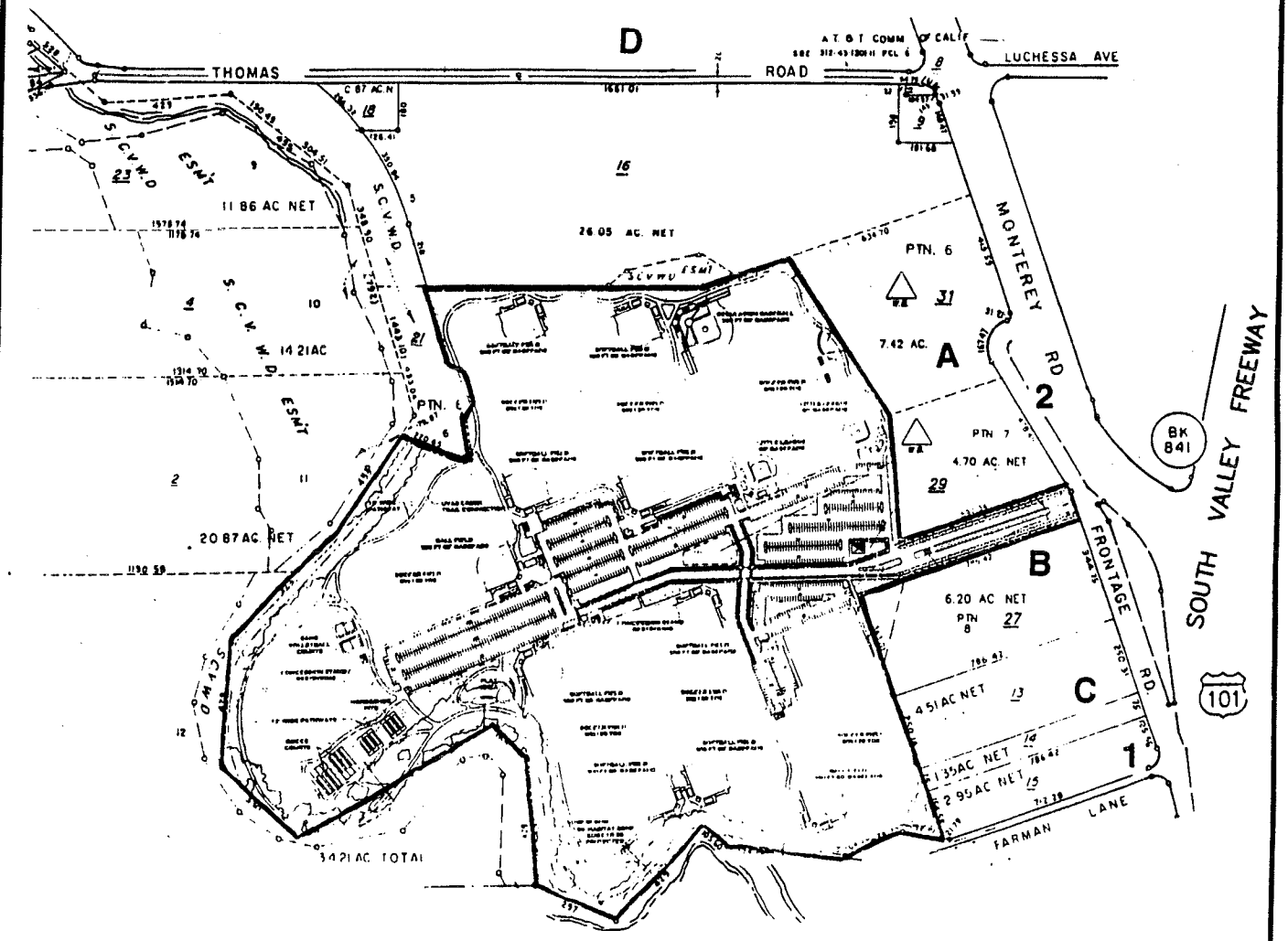
Scenario	Commercial A	Commercial B	Commercial C	Residential
1. Soccer	53	53	52	60
2. Soccer and Skating	54	54	53	60
3. Baseball	56	56	55	63
4. Baseball and Skating	57	56	55	63

Source: Edward L. Pack Associates, Inc.

Short-term Sports Park Noise Effects on Residential and Commercial Uses

In addition to the noise exposure evaluations against the standards of the City of Gilroy Noise Element, a review of potential short-term noise impacts was evaluated. Experience with sports parks and baseball fields has revealed that residents may be easily annoyed by spectator shouting and public address system announcements, regardless of the total averaged noise exposure that is generated. Should the sports park be constructed after the homes are built and occupied, the potential for annoyance is increased, as the residents become accustomed to the existing undeveloped environment.

Short-term noise is defined as the noise levels that occur over a period of approximately one hour or less. The noise level perceived over a one hour period can be averaged, which is defined by the continuous equivalent-energy level of L_{eq}. The maximum sound level over any given period of time is defined by the L_{max} descriptor, which is a one second rms value of the peak noise level, and is the highest level one would perceive at any given time. During a typical sports event, the L_{max} level will be approximately 22 dB higher than the hourly L_{eq}.



Locations for which noise exposure calculations were made are labeled **A, B, C** and **D**.

24-hour existing noise recordings were made at locations labeled **1** and **2**.

Source: Edward L. Pack Associates, Inc.

Scale: 1" = 400'

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Noise Exposure Study Locations

Figure 19

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The City of Gilroy has no standards for the limitation of short-term noise impacts, thus, the evaluations made in this study were derived from studies of typical residential areas adjacent to similar type parks and ball fields in the South Bay Area.

Baseball games are expected to generate hourly average noise levels of 68 dBA L_{eq}, with maximum noise levels up to 80 dBA at the most impacted locations. Typical suburban residential areas have background noise levels of 50-55 dBA during the daytime. Thus, a project-generated noise level of 55 dBA L_{eq} would be the optimum feasible and a level of 60 dBA L_{eq} would be barely allowable within standards. Reducing maximum noise levels to below 70 dBA would also be optimal while maximum noise levels below 75 dBA would be considered acceptable.

Construction Noise Impacts

Short-term noise could occur from construction of the uses proposed or approved for the project site. Construction equipment typically generates noise levels in the range of 70 to 90 dBA at a distance of 50 feet. Existing residences to the north of West Luchessa Avenue, the four existing residences on the project site (which would be removed for commercial development at some point), and not-yet-built project site development could all experience construction noise effects as different portions of the project site are constructed. Residences near roads adjacent to the project site could be subjected to excessive noise from trucks hauling materials and equipment to the project site.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G states that a project would normally have a significant effect on the environment if it would:

- result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- result in exposure of persons to or generation of 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;

Unavoidable Significant Impact–Long-Term and Short-term Noise from Sports Park Activities. Activities at the approved, but not yet constructed sports park, including athletic events and traffic entering and exiting the project site would generate long-term noise. The noise generated by these activities would be up to 63 dBA_{DNL}, thereby exceeding acceptable City standards (60 dBA_{DNL}) at the proposed residential area north of the sports park. These noise levels would be within City standards (65 dBA_{DNL}) for the commercial areas. In addition, activities at the

approved, but not yet constructed sports park, including spectator shouting and public address system announcements, would generate short-term, annoyance noise at the residential area. The short-term noise generated by these activities would be up to 80 dBA.

Mitigation measures are available that would reduce both long-term and short-term operational noise impacts to a less than significant level. To reduce the long-term noise to a less than significant level, a six-foot tall acoustically effective barrier would be required along the northern boundary of the sports park site. To reduce flanking noise, the barrier would continue along the east boundary of the residential area for a distance of 100 feet. The barrier height is in reference to the nearest ball field elevation at the foot of the bleachers. This barrier would reduce the noise level to 60 dBA_{DNL} at the nearest residences. To reduce short-term noise impacts to a less than significant level an 11-foot tall acoustically effective barrier would be required along the northern boundary of the sports park site. To reduce flanking noise, the barrier would continue along the east property line of the residential project for a distance of 100 feet, diminishing in height to six feet at its terminus. This barrier would reduce noise levels at the nearest residences to 55 dBA_{DNL}.

To achieve an acoustically-effective barrier, the barrier would need to be made air-tight, i.e. without cracks, gaps, or other openings and would need to provide for long-term durability. The barriers could be constructed of wood, concrete, stucco, masonry, earth berm or a combination thereof. All joints, including connections with posts or pilasters would need to be sealed air-tight and no openings would be permitted between the upper barrier components and the ground.

Implementation of the mitigation measures necessary to reduce the noise impacts to a less than significant level would not be feasible. The location of the barrier is partly within the SCVWD flood flowage easement. Placement of the barrier would potentially impede the flow of floodwaters and could result in increased flooding impacts in other areas. This would be a significant adverse secondary environmental impact. Therefore, sports park noise impacts on the proposed residential area would be an unavoidable significant impact.

Unavoidable Significant Impact–Exterior Traffic Noise at Residential Areas along Monterey Street. At General Plan build-out, noise levels from traffic on Monterey Street would exceed City standards at adjacent proposed residential areas. Noise exceeding City noise standards would be a significant adverse environmental impact. However, this portion of the project site is located within a flood zone, and a sound attenuation barrier would not be feasible if the barrier were to interfere with flood flows or affect off-site flood levels. A mitigation measure presented in Section 2.7 Hydrology requires a hydrology study to determine requirements for development of the portion of the proposed residential area that is within the 100-year flood zone, which includes the area nearest to Monterey Road. The hydrology study may indicate that a sound attenuation barrier in this location would result in flood impacts. This would make a sound attenuation barrier infeasible in this location. Additionally, a noise barrier would place a visually obtrusive element

along southern Monterey Street, a principal gateway designated in the *Draft Gilroy 1999-2020 General Plan*. This would result in a secondary visual impact. Because of the potential for secondary impact to hydrology and aesthetics, exterior noise levels in excess of City standards in this location would be an unavoidable significant impact.

Unavoidable Significant Impact–Exterior Traffic Noise at Residential Areas along West Luchessa Avenue. At General Plan build-out, noise levels from traffic on West Luchessa Avenue would exceed City standards at the proposed residential areas adjacent to that street. The actual noise levels experienced at the residential area would depend on actual future traffic volumes and the lot configuration of the residential area. Noise exceeding City noise standards would be a significant adverse environmental impact.

A sound attenuation barrier would be required to reduce the level of noise to within City standards. Because of unknown variables, the exact requirements for mitigation of the noise impact cannot be determined at this time. It is probable that reducing noise to an acceptable level would require a sound attenuation barrier that is taller than would be considered aesthetically acceptable by the City. Implementation of the following mitigation measure would reduce the impact, but because the height of the attenuation barrier would be limited, the impact would probably not be reduced to a less than significant level. The impact would be an unavoidable significant impact.

17. Subject to the review and approval of the City of Gilroy Community Development Department, the applicant for any residential development on the project site along West Luchessa Avenue shall construct a sound attenuation barrier eight feet in height when measured from the near curb of West Luchessa Avenue. The barrier shall be completed prior to occupancy of any homes on lots adjacent to West Luchessa Avenue.

Potentially Significant Impact–Interior Noise Levels at Residential Areas. Title 24 of the California Code of Regulations requires a maximum interior noise level of 45 dBA. Traffic and sports park noise at the proposed residential area would exceed the City standard of 60dBA$_{DNL}$ for exterior areas. Typical residential construction provides approximately 15 dB of noise reduction, so interior noise levels would be expected to exceed 45 dBA. This would be a significant adverse environmental impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

18. Subject to the review and approval of the City of Gilroy Building Division, the applicant for any residential development on the project site shall conduct an acoustical study and establish engineering requirements to be included in construction plans to maintain interior noise levels at no greater than 45 dBA$_{DNL}$.

Interior noise attenuation techniques may include forced air ventilation or air conditioning for all habitable rooms with a window facing noise sources, triple-paned windows, sound insulation or other appropriate means that will reduce interior noise levels to no greater than 45 dBA_{DNL}.

Significant Impact–Short-Term Construction Noise. Construction activities at the project site would result in noise levels that exceed the standards specified in the *City of Gilroy General Plan*. This would be a significant environmental impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

19. The following language shall be included on any permits issued at the project site, subject to the review and approval of the City of Gilroy Engineering Division. "All noise generating construction activities shall be limited to weekdays between 7:00 AM and 7:00 PM, and to Saturdays and City holidays between 9:00 AM and 7:00 PM. No construction is allowed on Sundays. In addition, temporary berms or noise attenuation barriers shall be utilized when necessary."

2.9 Fire Protection Services

Environmental Setting

The project site is located in unincorporated Santa Clara County. Fire protective and emergency medical response services are currently provided by the South Santa Clara County Fire Department (SSCCFD). SSCCFD stations are located at U.S. Highway 101 and Masten Road, and at State Highway 152 and Burchell Road. The City of Gilroy has an automatic aid agreement with SSCCFD. Under this agreement, the first engine company that is able to reach an emergency responds automatically, and an agency is reimbursed for services provided within another jurisdiction. The City of Gilroy Fire Department is located 1.5 miles from the project site and would currently be the first fire company to respond to the project site. Under existing jurisdictional boundaries, the SSCCFD will continue to serve the Gilroy Sports Park when it is built.

The *Draft Gilroy 1999-2020 General Plan* proposes to maintain or improve the current fire department average response time of five minutes. The City of Gilroy charges a public safety impact fee for new construction. This fee covers the incremental increases in service required for new development. The City of Gilroy is preparing a *Fire Services Master Plan* that will identify future fire department needs and potential new fire station locations. A new station is expected to be built on Santa Teresa Boulevard south of State Highway 152 (Rodger Maggio, personal communication, January 10, 2000).

Project Analysis

If the USA amendment request is approved, the City of Gilroy will assume responsibility for the provision of fire protective services at the approved sports park, as well as for the proposed residential and commercial areas, upon annexation.

The City of Gilroy Fire Department would provide fire protective and emergency medical response services to the proposed project. The nearest fire station is located at Chestnut Street and Ninth Street, approximately 1.5 miles from the project site.

The proposed project would enlarge the geographic range of coverage for the fire department but would not require the addition or enlargement of facilities or the addition of equipment or personnel. The expanded coverage area is adjacent to existing service areas and could be reached from the fire station well within the fire department's emergency response time standard (Rodger Maggio, personal communication, January 10, 2000). Public safety impact fees are expected to cover incremental increases in demand on fire services.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire services.

No Impact–Fire Services. The proposed project does not result in the need for additional facilities for the provision of fire protective services, and would not decrease the level of these services provided to any part of the community. The project site could be served within City response time standards without the need for additional facilities. Public safety impact fees paid by developments within the project area are expected to cover incremental increases in demand on fire services. The proposed project would have no physical impact to the environment associated with the provision of fire protective services. Mitigation measures are not necessary.

2.10 Police Protection Services

Environmental Setting

The project site is located in unincorporated Santa Clara County. Police protective services at the project site are currently provided by the Santa Clara County Sheriff's Department. Under existing jurisdictional boundaries, the Santa Clara County Sheriff's Department would continue to serve the Gilroy Sports Park, when it is built (Captain Lanny Brown, personal communication, January 11, 2000).

The *Draft Gilroy 1999-2020 General Plan* directs the Police Department to maintain or improve the existing average response time of four and one-half minutes. The City of Gilroy charges a public safety impact fee for new construction. This fee covers the incremental increases in service required for new development.

Project Analysis

If the USA amendment request is approved, the City of Gilroy will assume responsibility for the provision of police services at the approved sports park, as well as at the proposed residential and commercial areas, upon annexation.

The Gilroy Police Department has a staff of 92 people. Of these, 57 are sworn officers and 35 are non-sworn personnel (Kathy Sakahara, personal communication, December 3, 1998). The police station is located near the corner of Sixth Street and Rossanna Street, approximately 1.5 miles from the project site. The City of Gilroy Police Department is staffed on a per capita basis, with a preferred ratio of 1.5 sworn officers per 1,000 population (Captain Lanny Brown, personal communication, January 11, 2000). The proposed project will add approximately 500 residents and therefore the required increase in personnel would be of the equivalent of three-quarters of an officer. Existing police facilities would accommodate the required increase in personnel.

The proposed project would enlarge the geographic range of coverage for the police department but would not require the addition or enlargement of facilities or the addition of equipment or personnel. The expanded coverage area is adjacent to existing service areas and police would be able to respond within an acceptable period of time. Public safety impact fees are expected to cover incremental increases in demand on police services.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police services.

Less Than Significant Impact–Police Services. The proposed project does not result in the need for additional facilities for the provision of police services, and would not decrease the level of these services provided to any part of the community. The project site could be served by the City of Gilroy Police Department within established response times without the need for additional facilities. The equivalent of three-quarters of an officer would be required for the

department to maintain established per capita staffing ratios. Public safety impact fees paid by the project are expected to cover incremental increases in demand on police services. The proposed project would have no physical impact to the environment associated with the provision of police protection services. Mitigation measures are not necessary.

2.11 Schools

Environmental Setting

The project site is within the boundaries of the Gilroy Unified School District (GUSD). The GUSD has a current total enrollment of approximately 9,200 students. Enrollment has increased approximately 33 percent since 1980 and by approximately eight percent since 1990. The GUSD operates nine elementary schools, two junior high schools, one high school and one special-needs high school. The nearest elementary school to the project site is Glen View, located on West Eighth Street near Princevalle Street, approximately four tenths of a mile from the project site. Brownell and South Valley Junior High Schools are both located near Sixth Street, approximately three quarters of a mile from the project site. Gilroy High School is located at the intersection of Princevalle Street and Tenth Street, approximately two tenths of a mile from the project site.

The GUSD has an open enrollment system that allows students to attend the school of their choice within the district. The GUSD has a total enrollment for the 1999-2000 school year of 9,193 students, with 5,376 in kindergarten through 6th grade, 1,335 in 7th and 8th grade, and 2,482 in high school. The district's schools have capacity for 4,950 kindergarten through 6th grade students, 1,998 7th and 8th grade students and 2,349 high school students. A new elementary school is under construction. The GUSD plans to construct a new middle school soon. The district also plans to reconfigure the elementary schools to accommodate kindergarten through 5th grade and the middle schools to accommodate 6th through 8th grade. This is intended to bring enrollment in line with capacity for kindergarten though 8th grade. Actual attendance at schools is less than the enrollment figures due to students who drop out during the school year. Since some students drop out each year, actual attendance is close to capacity. (Charlie van Meder, personal communication, February 10, 2000).

Senate Bill 50, adopted by the state legislature in 1998 established limitations in the Government Code on mitigation measures that may be imposed by a city, county, school district or other local agency in approving a development that may affect schools. Government Code section 65996(b) prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any legislative or judicial act involving the planning, use or development of real property. Government Code section 65995(a) sets a limit on school impact fees that

may be assessed. The limit established (in 1998) is $1.93 per square foot for residential and $.31 per square foot for commercial construction. These rates are adjusted for inflation in January of even-numbered years.

Project Analysis

The proposed project would result in approximately 500 new residents, based on California Department of Finance statistics for average household size in Gilroy. According to the *Gilroy 1999-2020 General Plan*, approximately one third of all residents were under 18 years of age at the 1990 census. Therefore approximately 166 children under age 18 could be expected to live at the proposed project, of which approximately 120 would be school aged. If evenly distributed, there would be approximately nine students per grade level at the proposed project.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools.

Less than Significant Impact: Student Enrollment Exceeding Capacity

The proposed project would add approximately 120 students to the GUSD. Enrollment is currently over capacity at the District's elementary schools and high school. However, since some students drop out each year, actual attendance is close to capacity. The District is constructing a new elementary school and has plans to construct a new middle school. In addition, grade level re-distribution among schools will bring kindergarten through 8th grade enrollment close to capacity for each of those grade levels.

Government Code section 65995(a) sets a limit on school impact fees that may be assessed by a school district. These development fees are considered adequate to mitigate school impacts. Therefore, no other mitigation is necessary.

2.12 Water Supply

Environmental Setting

The project site is located in unincorporated Santa Clara County. Potable water on the project site is currently provided by private on-site wells. The sports park will have both potable and recycled water supplied by the City of Gilroy.

City of Gilroy Water Supply System

The City of Gilroy *Water Master Plan* was prepared in May 1993. That plan provides background on the existing City of Gilroy water supply system and a program for future development. The City of Gilroy obtains all of its water from groundwater from the Llagas sub basin of the Santa Clara Valley. The City currently operates eight wells. The present maximum pumping capacity is 14.3 mgd, or approximately 16,000 acre-feet per year. Two new wells expected to be in service by 2001 will add to this capacity. According to the *City of Gilroy Draft General Plan EIR* the current citywide maximum water demand is approximately 12.5 million gallons per day (mgd). This equals approximately 14,000 acre-feet of water annually.

The City of Gilroy is divided into three water distribution pressure zones. The project site is located in Pressure Zone 1, which is the low-lying area of the City. No pumping is required to supply water to Zone 1. Water is stored in several steel reservoirs with a total capacity of 6.4 million gallons. Two reservoirs serve Zone 1, with a total capacity of 5 million gallons. The City operates its wills to meet system demands based on reservoir levels. The wells are also used to meet peak demands and fire flows. In winter the reservoirs are drawn to half-full before filling from wells, with higher set points in the summer. The wells pump directly into the distribution system with any excess water pumped going to replenish the reservoirs. Water is lightly chlorinated at the well sites. All well sites are located in Zone 1.

Existing and Planned Potable Water Infrastructure

A City of Gilroy municipal water supply line is located beneath Monterey Street, just east of the project site. Although the project site is outside the existing City of Gilroy USA, the approved, City-owned sports park will receive potable water from the City of Gilroy. The sports park is contiguous with the Gilroy USA at the point where the sports park access road meets Monterey Frontage Road, and services will be supplied at this point, then distributed within the sports park. The sports park will require 26 acre-feet of potable water annually. A water supply line will be built under Monterey Frontage Road as part of the sports park project.

Current Use Rates

The City of Gilroy *Water Master Plan* found existing low-density residential (4 units per acre) water use to be approximately 1,800 gallons per day per acre (gpd/ac.), with a range from 1,450 to 2,100 gpd/ac. Medium density residential (12 units per acre) water use was approximately 2,850 gpd/ac., with a range of 2,550 to 3,200 gpd/ac. Commercial usage was approximately 1,000 gpd/ac., with a range from 800 to 1,200 gpd/ac. The usage varied with changes in the weather and usage habits during times of drought.

Current and Approved Project Site Demand

The existing potable water supply on the project site is from private on-site wells. Current water use on the project site is estimated to be approximately 135.9, excluding the sports park site. Water use was determined using City of Gilroy *Water Master Plan* usage rates for rural residential and commercial uses. Agricultural use was estimated based on water use for lettuce, which was the crop on the project site in the summer of 1998. The project site's agricultural water use assumes two lettuce crops per year and a typical water use rate of 1.5 acre-feet per crop per acre of lettuce. Estimated current water use is presented in Table 8.

TABLE 8

Estimated Current Project Site Water Use[1]

Use	Approximate Acres	Use Rate gpapd	Gallons Per Day	Acre-feet Per Year
Rural Residential	4.2	2,300	9,660	10.8
Commercial	0.8	1,000	800	0.9
Agriculture	49.8	-	-	149.4
Total	**54.8**	**-**	**-**	**161.1**

1. For a clearer comparison the sports park has been omitted from this table. The sports park will use approximately 26 acre feet of potable water and 155 acre-feet of recycled water per year. Agricultural uses on the sports park site use an estimated 235 acre-feet per year.

Source: City of Gilroy *Water Master Plan* and Department of Water Resources

Recycled Water

There is currently no recycled water supply available on the project site. A City of Gilroy recycled water supply line originates at the wastewater treatment plant southeast of Gilroy, runs northwesterly until it meets the Princevalle drainage channel, then follows the channel westward through Christmas Hill Park to Santa Teresa Boulevard. The City of Gilroy will extend a recycled water line to the project site to supply the approved sports park. The sports park will require approximately 155 acre-feet of irrigation water annually at build-out. The Eagle Ridge residential and golf course project in western Gilroy will be using approximately 1,120 acre-feet of recycled water per year when completed.

According to the *City of Gilroy Draft General Plan EIR* the City of Gilroy will have a recycled water delivery capacity of 6,900 acre-feet per year.

Project Analysis

If the USA amendment is approved, the City of Gilroy will assume responsibility for the provision of water to the proposed commercial and residential areas of the project site upon annexation, in addition to the future water service already committed to the approved sports park. Table 9 summarizes projected water supply demands of the project site.

TABLE 9

Projected Water Demand of Proposed Project[1]

Component	Approximate Acres	Use Rate (gpdpa)[2]	Gallons per day	Acre-feet/year[3]
Residential	26.2	2,000[4]	52,400	58.7
Neighborhood Park	1.5	1,000	1,500	1.7
Commercial	27.1	1,000	27,100	30.4
Project Total	**54.8**	-	**81,000**	**90.8**
Existing City Demand	-	-	12,500,000	14,000
Current City Capacity	-	-	14,300,000	16,000

1. For a clearer comparison the sports park has been omitted from this table. The sports park will use approximately 26-acre feet of potable water and 155 acre-feet of recycled water per year.
2. Use rates are from the City of Gilroy's *Water Master Plan.*
3. Acre feet per year = gallons per day x 365 days / 325,829 gallons per acre foot.
4. The City of Gilroy's *Water Master Plan* lists average use rates for low density residential (4 units per acre) and medium density (12 units per acre). The density of the proposed residential development is 5.6 units per acre; therefore an interpolated use rate has been used.

Source: EMC Planning Group Inc.

The project site is within the boundaries studied and planned for in the 1993 *Water Master Plan* (refer to figure 1-1 in the *Water Master Plan*). According to Don Nunes, City of Gilroy Senior Civil Engineer (January 13, 2000 telephone conversation with consultant), although the project site had a general plan land use designation of OPEN SPACE a higher use rate was applied to the site to assist in planning for water. Therefore, development of the project site was accounted for in preparation and implementation of the *Water Master Plan.*

Potable Water

The City of Gilroy would provide potable water to the residential and commercial areas of the proposed project from the main located beneath Monterey Street or Monterey Frontage Road, adjacent to the project site.

Based on the conceptual residential plan, the proposed residential development would have an average density of 5.6 homes per acre, or slightly more dense than the low-density residential use category in the *Water Master Plan*. At an interpolated approximate use rate of 2,000 gpd/ac. the proposed residential development would require approximately 52,400 gallons per day. This is equal to approximately 58.7 acre-feet of water annually. The 1.5-acre neighborhood park would use approximately 1,500 gallons per day or approximately 1.7 acre-feet per year. No potable water would be required for neighborhood park irrigation if recycled water were used instead. The proposed commercial development would use approximately 27,100 gallons per day, or approximately 30.4 acre-feet annually. This amount could be reduced if recycled water were used for irrigation needs. The total proposed project would require approximately 81,000 gallons of water per day or 90.8 acre-feet of water annually. The City of Gilroy has an adequate supply of potable water available to meet the total potable water demand of the proposed project.

Recycled Water

Specific water delivery plans for the proposed residential and commercial uses have not been developed. It is possible that landscaped areas in the proposed commercial development, neighborhood park and street right-of-ways could be irrigated with recycled water. The park area would require approximately 1.7 acre-feet of water per year. The commercial areas, based on an assumed 20 percent landscaped area, would require approximately 5.6 acre-feet of water. The City of Gilroy will have a demand of less than 1,500 acre-feet per year of recycled water when the Eagle Ridge project is completed, and a supply capacity of 9,600 acre-feet of recycled water. The City of Gilroy has an adequate supply of recycled water available to meet the potential demand of the proposed project.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- require or result in the construction of new water or wastewater treatment facilities or storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- result in a substantial depletion of water supply or solid waste disposal capacity.

Less Than Significant Impact–Construction of Potable Water and Recycled Water Infrastructure. The proposed project does not require substantial extensions or upgrades to the existing potable or recycled water supply infrastructure. Existing or planned lines within adjacent street right-of-ways would serve the proposed project. The project site was included in the 1993 *Water Master Plan* under a more intensive land use than the OPEN SPACE designation in the *Gilroy General Plan.* Development of the project site was accounted for in the *Water Master Plan.* Construction of infrastructure for the proposed project would have a less than significant environmental impact. Mitigation measures are not necessary.

Less Than Significant Impact–City Water Supply. The proposed project would result in an incremental increase in demand for potable water that is within the City of Gilroy's ability to provide. The City of Gilroy has adequate water supplies to meet the projected demand for potable water. The proposed project may increase demand for recycled water slightly if used for irrigation of the 1.5-acre neighborhood park or street, common or commercial area landscaping. The City of Gilroy has an adequate supply of recycled water to meet the projected demands. Mitigation measures are not necessary.

Beneficial Impact–Groundwater Supply. The proposed project would result in an overall decrease in water use. Less groundwater would be required from the Llagas Groundwater Sub Basin to supply the project site. Existing commercial, rural residential and agricultural uses on the 54.8 acres proposed for residential and commercial uses currently use an estimated 161.1 acre-feet of water per year. With the proposed commercial and residential uses, this portion of the project site is expected to use approximately 90.8 acre-feet of water per year. This would be a beneficial environmental impact.

2.13 Wastewater

Environmental Setting

The project site is located in unincorporated Santa Clara County. Wastewater is currently treated on-site in private septic systems. The City of Gilroy sanitary sewer system includes a network of trunk sewers (greater than or equal to ten inches in diameter) that generally flow from west to east and discharge into an interceptor sewer on the west side of Highway 101. The interceptor line carries flow south to the South County Regional Wastewater Authority (SCRWA) Wastewater Treatment Plant (Camp Dresser & McKee Inc. 1993). Wastewater trunk lines are located beneath Monterey Street, just east of the project site and beneath West Luchessa Avenue, just north of the project site. As part of the approved sports park project the City of Gilroy will extend a wastewater line to the project site. The approved sports park is projected to generate approximately 19,640 gpd of wastewater at project build-out.

The City of Gilroy *Sewer Master Plan* was prepared in May 1993. Median wastewater production was 980 gpd/ac. for low-density residential users, 2,100 gpd/ac. for medium density residential users and 300 gpd/ac. for commercial users. Wastewater generation varied with changes in water usage habits during times of drought.

According to the *City of Gilroy Draft General Plan EIR* the SCRWA treatment plant is permitted for an average dry weather flow of 7.5 mgd. The future build-out capacity of the plant is approximately 15 mgd. The City of Gilroy owns 58.1 percent of the plant's capacity, or 4.4 mgd of the current capacity. The current wastewater flow from the City of Gilroy is 3.1 mgd.

Project Analysis

With the addition of the project site to the USA, the City of Gilroy will assume responsibility for the provision sewer services to the proposed commercial and residential areas of the project site in addition to the future wastewater service already committed to the approved sports park.

The project site is within the boundaries studied and planned for in the 1993 *Sewer Master Plan* (refer to figure 1-1 in the *Sewer Master Plan*). According to Don Nunes, City of Gilroy Senior Civil Engineer (January 13, 2000 telephone conversation with consultant), although the project site had a general plan land use designation of OPEN SPACE, a higher use rate was applied to the site to assist in planning for sewer. Therefore, development of the project site was accounted for in preparation and implementation of the *Sewer Master Plan*.

The City of Gilroy would provide sanitary sewer services to the project site from existing lines or planned lines beneath West Luchessa Avenue, Monterey Street and Monterey Frontage Road. Based on an interpolated generation rate of 1,080 gpd the proposed residential development would generate approximately 28,296 gpd of wastewater and the proposed commercial development approximately 8,130 gpd. Total wastewater generation would be 36,426 gpd. The City of Gilroy wastewater treatment plant has adequate capacity to accommodate the additional wastewater.

Impacts and Mitigation Measures

Standards of Significance. CEQA Guidelines appendix G indicates that a project may have a significant effect on the environment if it would:

- fail to meet wastewater treatment requirements of the applicable Water Quality Control Board;
- require or result in the construction of new water or wastewater treatment facilities or storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects; or

Less Than Significant Impact–Construction of Wastewater Infrastructure. The proposed project does not require substantial extensions or upgrades to the existing wastewater infrastructure. Existing or planned lines within adjacent street right-of-ways would serve the proposed project. The project site was included in the 1993 *Sewer Master Plan* under a more intensive land use than the OPEN SPACE designation in the *Gilroy General Plan.* Development of the project site was accounted for in the *Sewer Master Plan.* Construction of infrastructure for the proposed project would have a less than significant environmental impact. Mitigation measures are not necessary.

2.14 Transportation/Circulation

Transportation Impact Analysis

A Transportation Impact Analysis was prepared by Fehr & Peers Associates, Inc. for the sports park project in January 1999. A second Transportation Impact Analysis was prepared by Fehr & Peers Associates, Inc. in January 2000 to address build-out of the USA amendment request, cumulatively with development of the approved sports park. This section summarizes the analysis and conclusions in that report. Both reports, in their entirety, are available for public review at the City of Gilroy Planning Division, 7351 Rosanna Street, Gilroy.

The purpose of the analysis is to identify the potential impacts of the proposed development on the transportation system in the vicinity of the project site. The impacts of the proposed project were estimated following the guidelines set forth by the City of Gilroy and the Santa Clara Valley Transportation Authority (VTA), which is the congestion management agency for Santa Clara County. The following six key intersections, four roadway segments, and three highway segments were evaluated.

Intersections

1. West Luchessa Avenue at Princevalle Street*
2. West Luchessa Avenue at Church Street*
3. Monterey Street and Luchessa Avenue
4. Monterey Street at Monterey Frontage Road*
5. Monterey Street and Southbound U.S. Highway 101 Ramps
6. Monterey Street and Northbound U.S. Highway 101 Ramps

*Intersections also analyzed during the Saturday peak hour.

Roadway Segments

1. West Luchessa Avenue, between Thomas Road and Princevalle Street
2. West Luchessa Avenue, between Princevalle Street and Monterey Street
3. Monterey Street, between Tenth Street and Luchessa Avenue
4. Monterey Street, between Luchessa Avenue and U.S. Highway 101

Highway Segments

1. U.S. Highway 101, between Leavesley Road and Monterey Street
2. U.S. Highway 101, between Monterey Street and State Highway 25
3. State Highway 152, between U.S. Highway 101 and Frazier Lake Road

The operations of the key intersections, roadway segments, and highway segments were evaluated during the morning (AM) and evening (PM) peak hours (the time periods when traffic volumes on the surrounding roadways are highest). A subset of intersections, denoted with an asterisk on the above list, was also evaluated during the Saturday peak hour, when traffic generated by the sports park will be highest. Intersection and roadway segment evaluations were made for the following scenarios:

Scenario 1: *Existing Conditions.* Existing volumes obtained from counts, representing peak one-hour traffic conditions during the morning and evening commute periods and on a Saturday afternoon.

Scenario 2: *Background Conditions.* Existing peak-hour volumes plus traffic from approved but not yet constructed developments in the area.

Scenario 3a-g: *Project Conditions.* Background peak-hour volumes plus project-generated traffic estimated for the proposed development. The project was evaluated for six levels of sports park development and build-out of the project (including development on the residential and commercial parcels).

Scenario 4: *Cumulative Conditions.* Traffic volumes estimated for conditions with build-out of the project (Scenario 3g) plus traffic associated with other pending (proposed but not approved) developments.

Scenario 5: *General Plan Build-out Conditions.* Traffic volumes forecast for the build-out of the General Plan.

Potential project impacts on the adjacent highway segments were evaluated following Congestion Management Program (CMP) guidelines. Site access and on-site circulation were reviewed for the residential component of the proposed project.

Environmental Setting

Funding Mechanisms

All developers within the City of Gilroy are required to pay traffic impact fees in accordance with the traffic fee ordinance adopted by the City of Gilroy. Additionally, developers may be required to make improvements to mitigate traffic impacts that result directly from their projects. Developers are given credit for those improvements that are considered to be permanent. Future developers that benefit from the improvements make reimbursements to the developer who installed the permanent improvements.

Existing Conditions

Roadway Network. Regional access to the project site is provided by U.S. Highway 101 and State Route 152 while local access is provided by Monterey Street, Monterey Frontage Road, West Luchessa Avenue, Thomas Road, Princevalle Street, and Church Street. The roadway network and study intersections are presented in Figure 20.

U.S. Highway 101 provides access to the project site via an interchange at Monterey Street. North of its interchange with Monterey Street, U.S. Highway 101 is a six-lane freeway, narrowing to four lanes north of Cochrane Road. South of Monterey Street, U.S. Highway 101 becomes a four-lane conventional highway. U.S. Highway 101 extends northward through San Jose and San Francisco and southward through the Southern California.

State Route 152 (Pacheco Pass Highway) connects U.S. Highway 101 to Interstate 5 and State Highway 99 in the California Central Valley and State Highway 1 in Watsonville. State Route 152 is two to four lanes wide. State Route 152 follows portions of U.S. Highway 101, Leavesley Road, and Monterey Street and First Street in and near Gilroy.

Monterey Street is a generally four-lane arterial through the City of Gilroy. Through downtown Gilroy (between Third and Seventh Streets), Monterey Street narrows to two travel lanes, with angled parking on the east site of the street separated from northbound through traffic by a raised median. North of the city limits, Monterey Street becomes Monterey Road, a rural highway with four travel lanes and a center

turn lane. Monterey Road continues northward into San Jose. South of its interchange with U.S. Highway 101, Monterey Street becomes Bolsa Road. Near the project site, the speed limit on Monterey Street is 50 miles per hour (mph).

Monterey Frontage Road is a two-lane road that extends southward from Monterey Street, near the Monterey Street/U.S. Highway 101 interchange, ending in a cul-de-sac south of the project site. Monterey Frontage Road is a frontage road located along the west side of Monterey Street and U.S. Highway 101 that provides direct access to the project site (and other properties).

Luchessa Avenue is a two- to four-lane roadway extending eastward from its terminus east of U.S. Highway 101 near Rossi Lane to west of Thomas Road. The segment of Luchessa Avenue between Thomas Road and Monterey Street was recently renamed from Thomas Road to West Luchessa Avenue. Near the project site, West Luchessa Avenue is two lanes wide, and the speed limit is 40 mph.

Thomas Road is a two-lane roadway that extends northward from Santa Teresa Boulevard to its all-way stop controlled intersection with West Luchessa Avenue.

Princevalle Street is a two-lane residential collector street that extends southward from First Street to Luchessa Avenue. It has a posted speed limit of 30 mph.

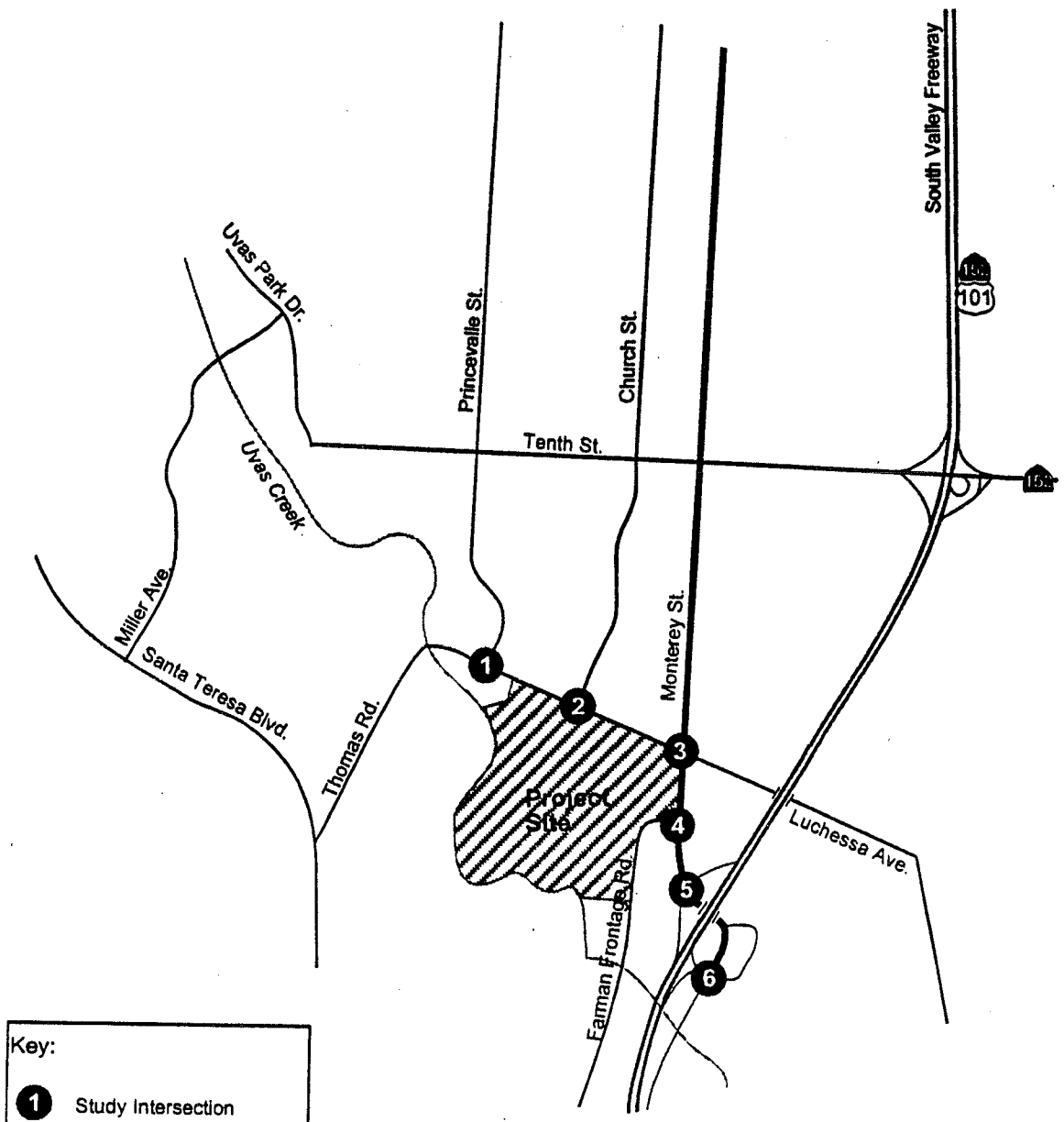
Church Street is a two-lane street extending northward from West Luchessa Avenue through downtown Gilroy to north of Farrell Avenue. Church Street is designated an arterial in the current General Plan between Luchessa Avenue and Farrell Avenue, and has a posted speed limit of 35 mph.

Transit Service. Bus service in Santa Clara County is operated by the Santa Clara Valley Transportation Authority (VTA). Currently, there are two bus routes operating within one-half mile of the project site, Route 68 and Route 17A.

Route 17A provides commute service between the intersections of Sixth and Hanna Streets and Southside Drive and Rossi Lane. Two northbound buses are provided during the morning commute period and two southbound buses during the evening commute period. Route 17A operates along Monterey Street, north of Luchessa Avenue, and Luchessa Avenue, east of Monterey Street.

Route 68 operates along Princevalle Street, north of West Luchessa Avenue and along West Luchessa Avenue and Thomas Road, west of Princevalle Street. Route 68 provides service between San Jose Diridon CalTrain Station and Gavilan College in Gilroy. Hours of operation are 4:30 AM to 1:00 AM on weekdays and 6:00 AM to 12:30 AM on weekends. Route 68 operates on a 15-minute headway during the commute hours and a 30- to 60-minute headway during other hours.

The Joint Powers Board provides commuter rail service (CalTrain) from Gilroy to San Francisco. CalTrain provides frequent train service between San Jose and San Francisco seven days a week. Extended service is provided to Morgan Hill and Gilroy during the commute hours only. The Gilroy CalTrain station is located east of Monterey Street between Seventh and Ninth Streets.



Source: Fehr and Peers Associates Inc.

Not to Scale

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy USA Amendment 98-03 Subsequent EIR

Road Network and Study Intersections

Figure 20

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Pedestrian and Bicycle Facilities. Pedestrian facilities include sidewalks, crosswalks, and pedestrian signals. Near the site, there are very limited pedestrian facilities. A sidewalk is provided along the north side of West Luchessa Avenue between Monterey Street and Princevalle Street. Sidewalks are not provided along Monterey Frontage Road or Monterey Street.

Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths are paved trails that are separated from roadways. Bike lanes are lanes on roadways designated for use by bicycles by striping, pavement legends, and signs. Bike routes are roadways that are designated for bicycle use with signs only. Currently, there is a bike path along the eastern side of Uvas Creek between West Luchessa Avenue and Westwood Avenue, north of the project site. Bike lanes are designated on Princevalle Street between West Luchessa Avenue and Sixth Street. The approved sports park project will extend the Uvas Creek Trail from West Luchessa Avenue, through the sports park and southward to Gavilan College.

Intersection Traffic Volumes. The operations of the key intersections were evaluated for morning (AM) and evening (PM) peak-hour traffic conditions. In addition, three of the key intersections were evaluated for Saturday peak-hour conditions. Peak conditions generally occur during the morning and evening commute periods on weekdays between 7:00 and 9:00 AM and 4:00 to 6:00 PM. The Saturday peak conditions generally occur between noon and 2:00 PM based on City-conducted machine counts conducted on West Luchessa Avenue in October 1998. Intersection operations were evaluated for the highest one- hour volume counted during each of these periods.

Peak-hour traffic volumes were obtained from the January 1999 transportation impact analysis (TIA) prepared for the sports park, and supplemented with data from the City of Gilroy 1999 Traffic Monitoring Program and new turning movement counts. The traffic volumes included in the January 1999 TIA were conducted in October and December 1998. For locations with older counts, growth factors were developed based on a comparison of traffic volumes at locations where both 1998 and 1999 data were available. Growth factors of 15 to 35 percent were applied to through traffic on West Luchessa Avenue and Monterey Street to reflect estimated growth between 1998 and current conditions.

Intersection Levels of Service. Current operations of the key intersections were evaluated with the existing volumes, existing lane configurations, traffic control devices, and signal phasings/timings used as inputs to the TRAFFIX level of service calculation program.

Level of service calculations indicate that all of the key intersections are operating at acceptable levels under Existing Conditions. The three signalized intersections (Monterey Street/Luchessa Avenue; and the Southbound and Northbound U.S. Highway 101 Ramps/Monterey Street) are operating at LOS B or C during both the AM and PM peak hours. Overall intersection operations at the key unsignalized intersections are at LOS A during the AM, PM, and Saturday peak hours.

The minor street approaches have no separate turn lanes at the unsignalized intersections. The worst case movement/lane groups at the intersections of West Luchessa Avenue / Princevalle Street and West Luchessa Avenue / Church Street are the southbound approaches (Princevalle and Church Streets). The Princevalle Street southbound approach is operating at LOS A during the AM, PM, and Saturday peak hours. The southbound Church Street approach is operating at LOS B during the AM and PM peak hours and LOS A during the Saturday peak hour. At the Monterey Street/Monterey Frontage Road intersection, the worst case approach is the eastbound (Monterey Frontage Road) approach, which is currently operating at LOS B during the AM and Saturday peak hours and LOS C during the PM peak hour.

Roadway Segments Levels of Service. Existing daily traffic volumes on West Luchessa Avenue were obtained from machine counts conducted in May 1999. Monterey Street daily volumes were estimated using turning movement counts conducted at the Monterey Street/Luchessa Avenue intersection and assuming PM peak-hour volumes are equivalent to nine percent of daily volumes (based on a comparison of the peak-hour intersection counts to the roadway segment counts on Luchessa Avenue). All four segments are currently operating at LOS A.

Highway Segments Level of Service. Existing SR 152 is a rural highway on the CMP roadway network and was therefore evaluated using the methodology presented in Chapter 8 of the 1994 *Highway Capacity Manual*, as required by the CMP. The level of service was determined by comparing actual measured flow rates against calculated threshold maximum flow rates for LOS A through LOS E. These service flow rates were calculated by adjusting the ideal capacity for a two-lane rural highway segment (2,800 vehicles per hour) to account for directional distribution of traffic, percentage of heavy vehicles, lane widths, shoulder widths, type of terrain, and the maximum volume-to-capacity ratio for the segment based percentage of no passing zones and terrain. Existing traffic volume data and roadway characteristics for the segment of State Highway 152 between US 101 and Frazier Lake Road were obtained from the *Wellington Business Park Transportation Impact Analysis* (Hexagon Transportation Consultants, Inc., November 18, 1999). Traffic counts were conducted on State Highway 152, east of Silacci Way, in August 1999. Level of service calculations were conducted using the Wellington TIA data. This segment of SR 152 is currently operating at LOS D during the AM peak hour and LOS E during the PM peak hour, unacceptable operating levels based on the City of Gilroy standard of LOS C.

The existing levels of service on U.S. Highway 101 are based on the segment densities reported in the CMP's *1998 Monitoring and Conformance Report*. The 1998 monitoring report did not include freeway segments south of Morgan Hill during the AM peak hour. Therefore, only PM peak hour information is available. The segments of U.S. Highway 101 reported were chosen to be consistent with the segments in the VTA's monitoring report. Based on the monitored freeway segment densities, all of the segments are operating at LOS B during the PM peak hour under Existing Conditions.

Background Conditions

Background Conditions are defined as conditions prior to completion of the proposed development. Traffic volumes for Background Conditions comprise existing volumes from counts plus traffic generated by approved developments in the area.

Traffic Volume Estimates. The traffic volumes for Background Conditions were estimated by adding existing volumes and traffic generated by approved but not yet constructed projects in the vicinity of the site. The list of approved projects was developed with input from City of Gilroy staff. Nine approved developments were identified in the vicinity of the project site. These developments include, among others, Eagle Ridge (550 homes), the Hilton Garden Inn (133 rooms), the Gilroy Cinema (8 screens/1,100 seats), and uses at the U.S. Highway 101/Monterey Street truck stop (including Carl's Jr. and Jeffries restaurants).

The traffic associated with these projects was estimated based on trip generation rates published in the Institute of Transportation Engineers *Trip Generation* (6th edition). The trips associated with each project were then assigned to the roadway network based on the trip distribution patterns contained in the City of Gilroy 1999 Traffic Monitoring Program TRAFFIX model, relative locations of complementary land uses, and existing travel patterns. The traffic associated with the approved developments was added to the existing volumes at the key intersections and roadway segments to estimate traffic volumes for Background Conditions. Saturday peak-hour traffic estimates assume that all the uses included in the approved developments peak at the same time, producing a conservatively high estimate of Saturday peak-hour volumes. Furthermore, the method used to estimate traffic volumes added by the approved developments during all study periods is conservative. The approved developments include both residential and commercial/industrial developments. Some of the trips originating in the residential developments will be destined for the industrial/commercial uses. No reduction was applied to take into account this internalization between approved developments within Gilroy, resulting in some "double counting."

Intersections Levels of Service. The key intersections studied would continue to operate at acceptable levels with traffic added by approved development projects. All of the key signalized intersections are projected to continue to operate at LOS B or C during all peak hours. The overall operating levels at the three unsignalized intersections are projected to be LOS A. The worst approach at the West Luchessa Avenue/Princevalle Street intersection is projected to operate at LOS B during the AM, PM and Saturday peak hours. The worst approach at the intersection of West Luchessa Avenue and Church Street is projected to operate at LOS B during the weekday AM and PM peak hours and LOS A during the Saturday peak hour. At the intersection of Monterey Street and Monterey Frontage Road, the operation of the worst approach (eastbound Monterey Frontage Road) is projected to be LOS B during the AM and Saturday peak hours and LOS C during the PM peak hour.

Roadway Segments Levels of Service. The key roadway segments are projected to continue to operate at acceptable levels with the addition of traffic associated with approved developments.

Highway Segment Level of Service. With the addition of traffic associated with already approved developments, the segment of State Highway 152 between U.S. Highway 101 and Frazier Lake Road is projected to degrade from LOS D to LOS-E during the AM peak hour and continue to operate at LOS E during the PM peak hour. These operating levels are unacceptable based on the City's standard.

Project Analysis

Project Conditions

Project Site Build-out Assumptions. Project Conditions are defined as Background Conditions plus traffic generated by the proposed project. Project Conditions were evaluated in seven phases. The approved sports park is included in the discussion of project impacts to present a project site-cumulative impact analysis. The proposed residential and commercial developments are described below.

The conceptual residential development includes 90 single family detached units and 57 triplex units. Direct access to the residential development would be provided by new public streets that will intersect with West Luchessa Avenue at two locations and with Monterey Street at one location. The Monterey Street intersection would be restricted to right-turns only (due to the existing raised median on Monterey Street).

There is no specific development proposed for the commercial parcels. Upon adoption of the *Draft Gilroy 1999-2020 General Plan*, the parcels will be designated COMMERCIAL GENERAL SERVICES. For the purposes of this analysis, it was assumed, at the direction of City staff, that approximately 590,000 square feet (s.f.) of retail space would be developed. The commercial parcels would front on Monterey Street and Monterey Frontage Road. The northern commercial parcels (those located north of the sports park entrance) were assumed to be accessed via one right-turn driveway on Monterey Street and one full access driveway on Monterey Frontage Road and the southern commercial parcels by at least one full access driveway on Monterey Frontage Road.

Traffic Estimation Method. The amount of traffic associated with the project was estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In the first step, the amounts of traffic entering and exiting the site were estimated for the study periods. In the second step, the directions the trips use to approach and depart the site were estimated. The trips were assigned to specific street segments and intersection turning movements in the third step.

Trip Generation. Project trip generation was estimated for the individual project components and then summed to estimate the total number of trips generated by the project. Figure 21 presents a summary of the trip generation estimated for the project. The methodologies used to estimate the trip generation for each component are described in the following sections.

Sports Park. Peak-hour trip generation for the approved sports park component of the project was estimated based on the number and types of playing fields and other uses, as well as input from the project architect on the expected operation of the sports park. The trip generation estimates assumed the use of all softball/baseball fields at one time. These ball fields are overlaid with soccer fields, which would not be in use during softball or baseball games. Basing the trip generation on the use of all softball/baseball fields was more conservative than assuming the use of all soccer fields because softball/baseball teams are likely to have slightly more players than soccer teams (15 to 18 per team versus 12 per team) and there are more proposed softball and baseball fields than soccer fields (13 fields versus seven fields)

Trip generation estimates were first developed for the worst case condition, the Saturday peak hour. The following additional assumptions were made:

(1) 30 players per field for softball and Little League and 36 players per field for Colt baseball;

(2) One spectator per player for softball and Colt baseball and 35 spectators per Little League game (to reflect more parents watching their children);

(3) An auto occupancy of 2.0 persons per vehicle for softball and colt baseball and 2.1 persons per vehicle for Little League (the higher occupancy for Little League was assumed due to more parents arriving with children).

(4) Seventy-five percent of the games were assumed to begin or end during the peak hour. It was further assumed that the players and spectators associated with these games would arrive or leave during that hour.

(5) Commercial recreation, general park use, and special events were estimated to add 200 trips (50 percent inbound and 50 percent outbound) during the Saturday peak hour.

(6) PM peak-hour trip generation was assumed to be 75 percent of the Saturday peak-hour trip generation for softball and baseball games and 50 percent of Saturday peak-hour trip generation for general park use, commercial recreation and special events.

(7) AM peak-hour trip generation was assumed to be primarily associated with drop-in use of the park and no organized events are expected during the morning commute hours. City staff estimated that a maximum of 50 people

would be likely to use the park during this time period (Bill Headley, personal communication, December 14, 1999). It was assumed that 80 percent of park users during the morning peak hour would travel by car and would enter and exit the site during the AM peak hour. The AM peak-hour trip generation for the sports park was therefore estimated to be 80 trips (40 inbound and 40 outbound). This trip generation estimate is believed to be conservative. The AM peak-hour trip generation for a 78-acre park based on ITE AM peak-hour generation rates for a "County Park" land use is one trip.

(8) In order to estimate weekday daily trip generation for the sports park, a peak-hour factor was developed based on the relationships of daily to PM peak-hour trip rates for similar uses contained in *Trip Generation* (Institute of Transportation Engineers, 1997). It is estimated that 12 percent of the daily sports park trips will enter and exit the site during the PM peak hour. This factor was used to expand PM peak-hour trip generation to estimate weekday daily sports park trip generation.

The sports park is estimated to generate a total of 4,600 weekday daily trips, 80 AM peak-hour tips (40 inbound and 40 outbound), 550 PM peak-hour trips (275 inbound and 275 outbound), and 800 Saturday peak-hour trips (400 inbound and 400 outbound).

Residential Development. The amount of traffic generated by the proposed residential development was estimated by applying appropriate trip generation rates to the development size. The ITE trip generation rates for "Single-Family Detached Residential" and "Condominium/Townhouse" land uses were multiplied by the number of units.

The proposed residential development is estimated to generate a total of 1,195 weekday daily trips, 93 AM peak-hour tips (21 inbound and 71 outbound), 122 PM peak-hour trips (75 inbound and 47 outbound), and 111 Saturday peak-hour trips (60 inbound and 51outbound).

Commercial Parcels. There is no specific development proposal for the commercial parcels. The parcels will be designated COMMERCIAL GENERAL SERVICES. At the direction of City staff, it was assumed that approximately 590,000 square feet (s.f.) of retail space would be developed. This development size was estimated based on a 25 percent floor-area-ratio (FAR) and an average building height of two stories on approximately 27 acres. This FAR is consistent with the *City of Gilroy General Plan EIR*. The commercial parcels are located within a floodway, and therefore, development of the commercial parcels is likely to be limited to a FAR of 25 percent or less. The ITE trip generation regression equations for shopping centers were used to estimate the project trip generation. The build-out size of 590,000 s.f. was input to these equations to estimate daily and AM, PM, and Saturday peak-hour trip generation. It was assumed that half of the trips would be generated by the northern parcels and half would be generated by the southern parcels.

Component	Use	Weekday Daily		AM Trip Rate[1]	AM Peak Hour Trips			PM Trip Rate[1]	PM Peak Hour Trips			Sat. Trip Rate[1]	Saturday Peak Hour Trips		
		Rate[1]	Trips		In	Out	Total		In	Out	Total		In	Out	Total
Sports Park															
Phases I& II	Entry Road Colt Baseball (1) Little League (2)	n/a	940	n/a	5	5	10	n/a	56	56	112	n/a	74	74	148
Phase III	Softball (1) Comm. Rec.	n/a	570	n/a	5	5	10	n/a	34	34	68	n/a	58	58	116
Phase IV	Softball (4)	n/a	1,300	n/a	5	5	10	n/a	78	78	156	n/a	110	110	220
Phase V	Softball (4)	n/a	1,300	n/a	5	5	10	n/a	78	78	156	n/a	110	110	220
VI & VII	Softball (1) General Park	n/a	490	n/a	20	20	40	n/a	29	29	58	n/a	48	48	96
Phases VIII&IX	Other Roadway Improvements & Uvas Creek Trail south	n/a	0	n/a	0	0	0	n/a	0	0	0	n/a	0	0	0
Subtotal			*4,600*		*40*	*40*	*80*		*275*	*275*	*550*		*400*	*400*	*800*
Residential															
	Single-Family	9.57	861	0.75	17	51	68	1.01	58	33	91	0.94	46	39	85
	Triplex	5.86	334	0.44	4	21	25	0.54	17	14	31	0.47	14	12	27
Subtotal			*1,195*		*21*	*71*	*93*		*75*	*47*	*122*		*60*	*51*	*111*
Commercial															
	Shopping Center	36.17	21,347	0.78	281	180	460	3.43	973	1,054	2,027	4.69	1,441	1,330	2,770
	Pass-by Reduction	30%	(6,404)	30%	(69)	(69)	(138)	30%	(304)	(304)	(608)	30%	(416)	(415)	(831)
Subtotal			*14,943*		*212*	*111*	*322*		*669*	*750*	*1,419*		*1,025*	*915*	*1,939*
Total			20,738		273	222	495		1,019	1,072	2,090		1,072	1,366	2,851

Notes: [1] Sports park trip generation is estimated based on expected usage of the park. Daily sports park trips were estimated assuming 12 percent of daily trips occur during the PM peak hour. Residential trip generation rates are from ITE *Trip Generation* (6th ed.) for single-family detached and townhouse/condominium land uses. Commercial trip generation is estimated based on ITE regression equations for shopping center trip generation. The presented rates are calculated by dividing the estimate number of trips by the size of the commercial space in thousands of square feet.

Source: Fehr and Peers Associates Inc.

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Trip Generation

Figure 21

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A 30 percent reduction factor was applied to the shopping center trip generation estimates to account for pass-by trips. Pass-by trips are trips generated by a proposed project that are attracted from the traffic already passing the project site on an adjacent street. A 30 percent reduction is the maximum allowed under VTA guidelines.

With the application of the pass-by reduction, the commercial parcels are estimated to add 14,943 new daily trips, 322 AM peak-hour trips (212 inbound and 111 outbound), 1,419 PM peak-hour trips (669 inbound and 750 outbound), and 1,939 Saturday peak-hour trips (1,025 inbound and 915 outbound).

Trip Distribution. The trip distribution pattern for the proposed project was estimated based on existing travel patterns in the vicinity of the site and the relative locations of complementary land uses in the area. Separate distribution patterns were developed for each project component. The major directions for project-generated traffic to approach and depart the project site are estimated to be:

Roadway/Direction	Sports Park	Residential	Commercial
Luchessa Avenue/Thomas Road West	30%	15%	30%
Princevalle Street North	10%	3%	5%
Church Street North	15%	5%	8%
Monterey Street North	10%	20%	17%
US 101 North	20%	40%	20%
US 101 South	10%	15%	15%
Luchessa Avenue East	0%	2%	0%
Princevalle/Church neighborhood	5%	0%	5%
	100%	100%	100%

The trip distribution pattern is illustrated in Figure 22.

Trip Assignment. The trips generated by the proposed project were assigned to the roadway system based on the directions of approach and departure discussed above. The pass-by trips associated with the commercial development were assigned based on the existing distribution of traffic (northbound versus southbound) on Monterey Street at the site driveways.

Figure 23 presents the peak-hour project trip assignments by turning movement at the study intersections and on nearby roadway segments for build-out conditions. Figure 24 shows project trips at the site driveways and the intersection of Monterey Street and Monterey Frontage Road.

The project trips for each analysis phase were added to the traffic volumes for Background Conditions to achieve turning-movement volumes at the key intersections for each analysis phase. The total traffic volumes at each of the key intersections under project build-out conditions are shown in Figure 25.

Intersection Levels of Service. Intersection level of service calculations were conducted to evaluate the operating conditions of the key intersections with project traffic and the potential impacts of the proposed project on the local roadway system. Intersection operations were evaluated for seven levels of development of the project. Signalized intersection level of service is summarized for all conditions in Figure 26. Unsignalized intersection level of service is summarized in Figure 27.

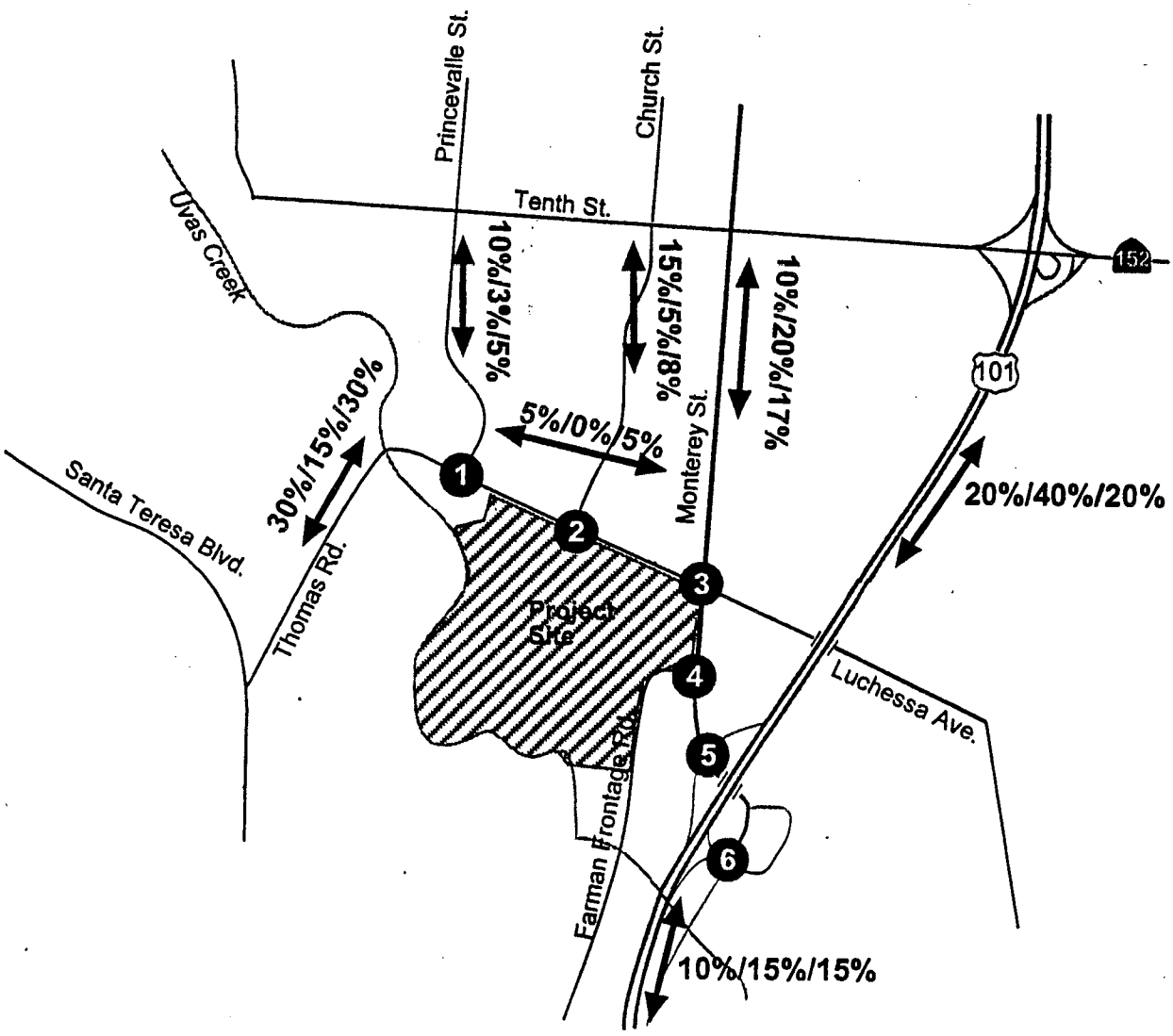
Monterey Street /U.S. Highway 101. The signalized intersections of Monterey Street with the US Highway 101 southbound ramps and with the US Highway 101 northbound ramps are projected to continue to operate at acceptable levels of service through build-out of the proposed project.

Monterey Street / Luchessa Avenue. The signalized intersection of Monterey Street and Luchessa Avenue is projected to continue to operate at LOS C during both the AM and PM peak hours through the completion of the sports park component of the project. With the additional traffic associated with the commercial and residential components of the project, this intersection is projected to deteriorate to LOS F during the PM peak hour (from LOS C under Background Conditions).

The conceptual residential site plan indicates an ultimate width of 116 to 120 feet for the Luchessa Avenue right-of-way. A separate eastbound right-turn lane at the Monterey Street/Luchessa Avenue intersection could be accommodated within this width. The City's General Plan includes the addition of a separate eastbound right-turn lane at this intersection.

The General Plan includes widening Luchessa Avenue and Monterey Street (between Luchessa Avenue and U.S. Highway 101) to six lanes and providing a second northbound left-turn lane at the Monterey Street/Luchessa Avenue intersection. The third northbound through lane on Monterey Street will need to end at the intersection of Monterey Street and Luchessa Avenue as a "trap" right-turn or left-turn lane, with only two through lanes continuing on Monterey Street north of Luchessa Avenue.

West Luchessa Avenue and Princevalle Street. The overall operations of the unsignalized intersection of West Luchessa Avenue and Princevalle Street are projected to be acceptable (LOS C or better) during the AM, PM, and Saturday peak hours through project build-out. The worst approach is projected to operate at an acceptable level through the final phase of the sports park. With build-out of the commercial parcels and the residential development, the worst approach is projected to deteriorate to LOS E during the PM peak hour and LOS F during the Saturday peak hour. Operations during the AM peak hour are projected to continue to be LOS B, an acceptable level.



Key:

1 Study Intersection

XX/XX/XX = Sports Park/ Residential/ Commercial

Not to Scale

Source: Fehr and Peers Associates Inc.

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Trip Distribution Pattern

Figure 22

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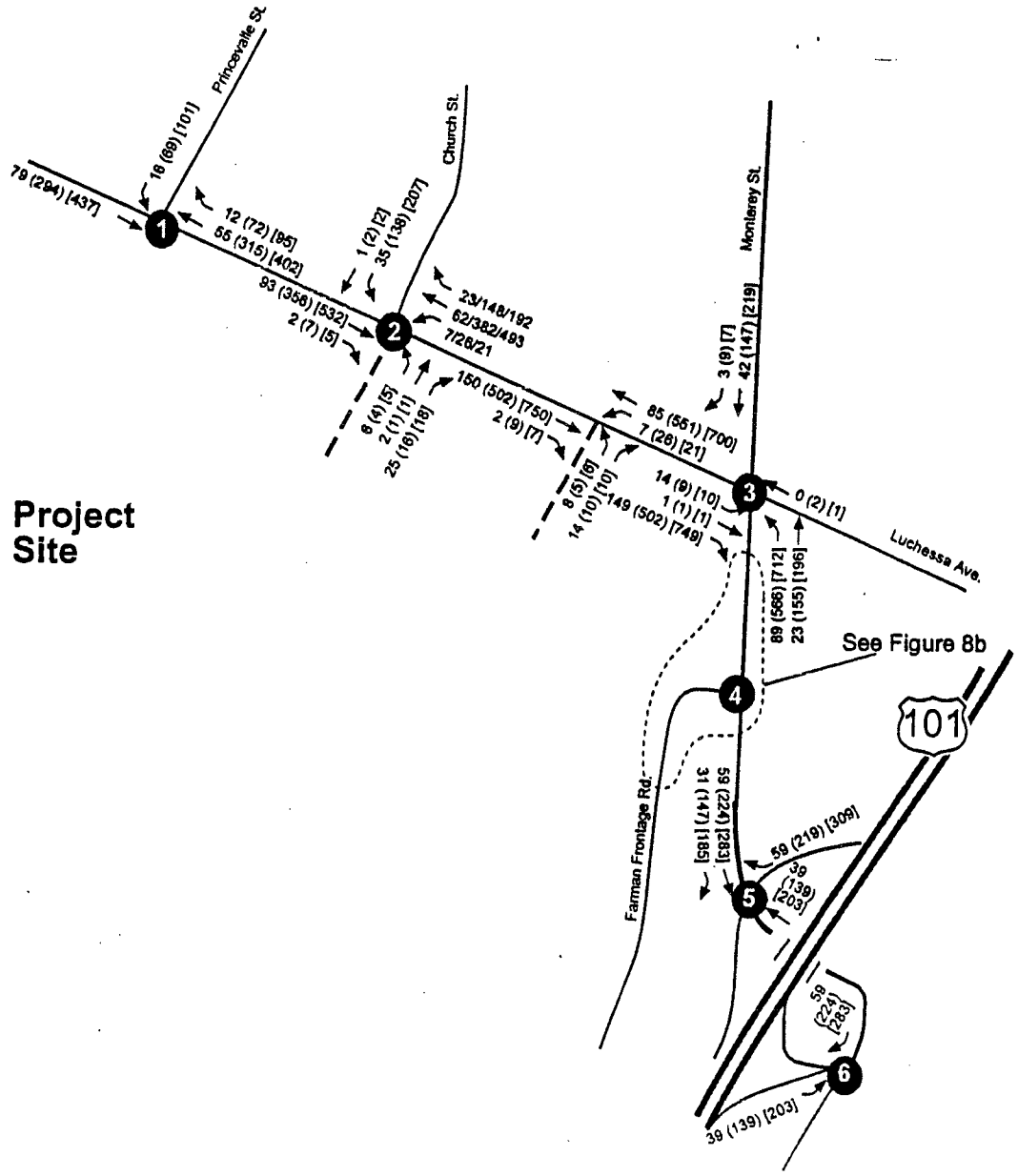

Source: Fehr and Peers Associates Inc.

Not to Scale

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Peak-Hour Project Trip Assignment (Project Buildout)

Figure 23

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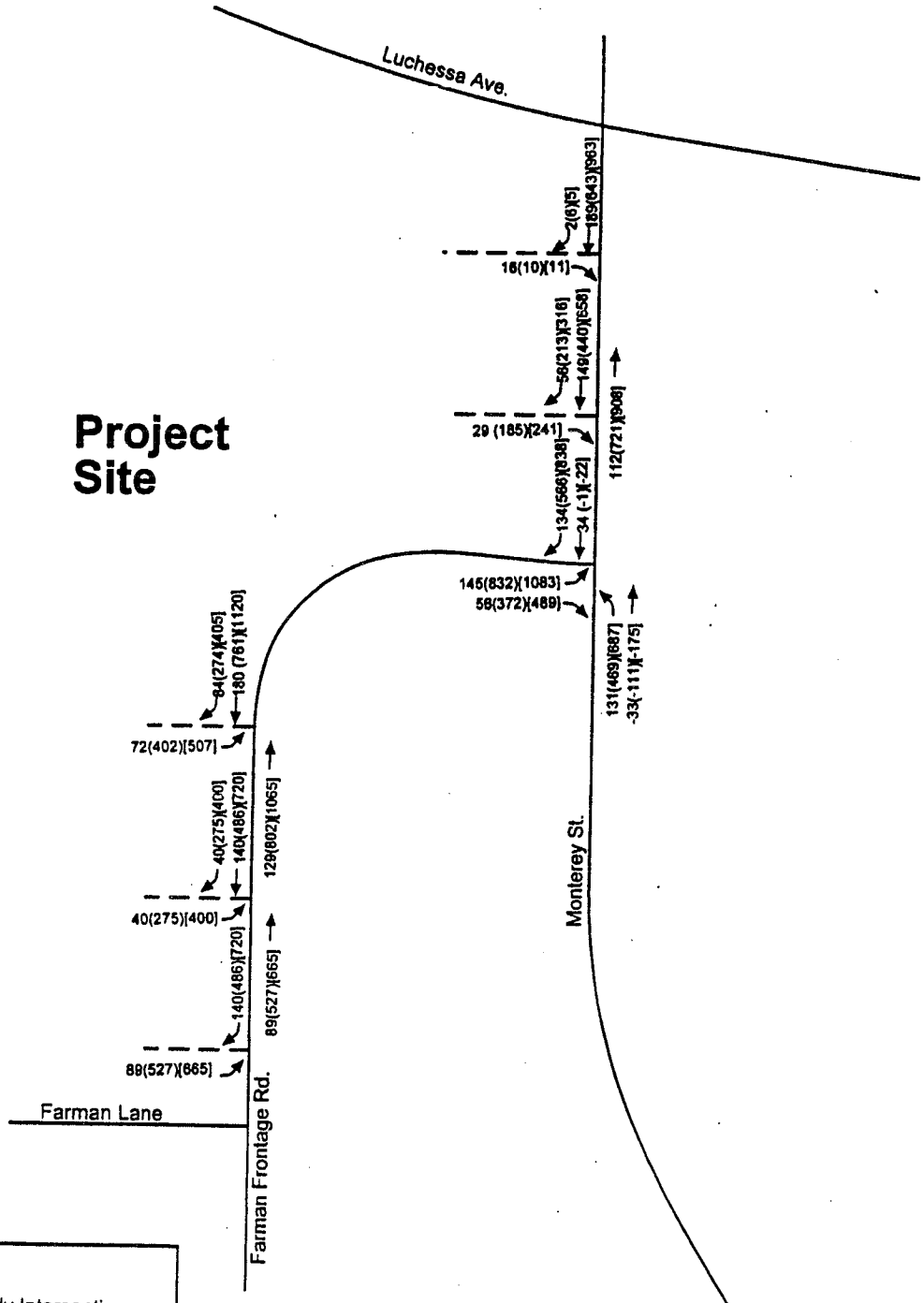

Note: Trip assigment at commercial driveways and the Monterey Street/Farman Frontage Road intersection includes pass-by trips.

Source: Fehr and Peers Associates Inc.

Not to Scale

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Project Trip Assignment at Site Driveways and Nearby Intersections

Figure 24

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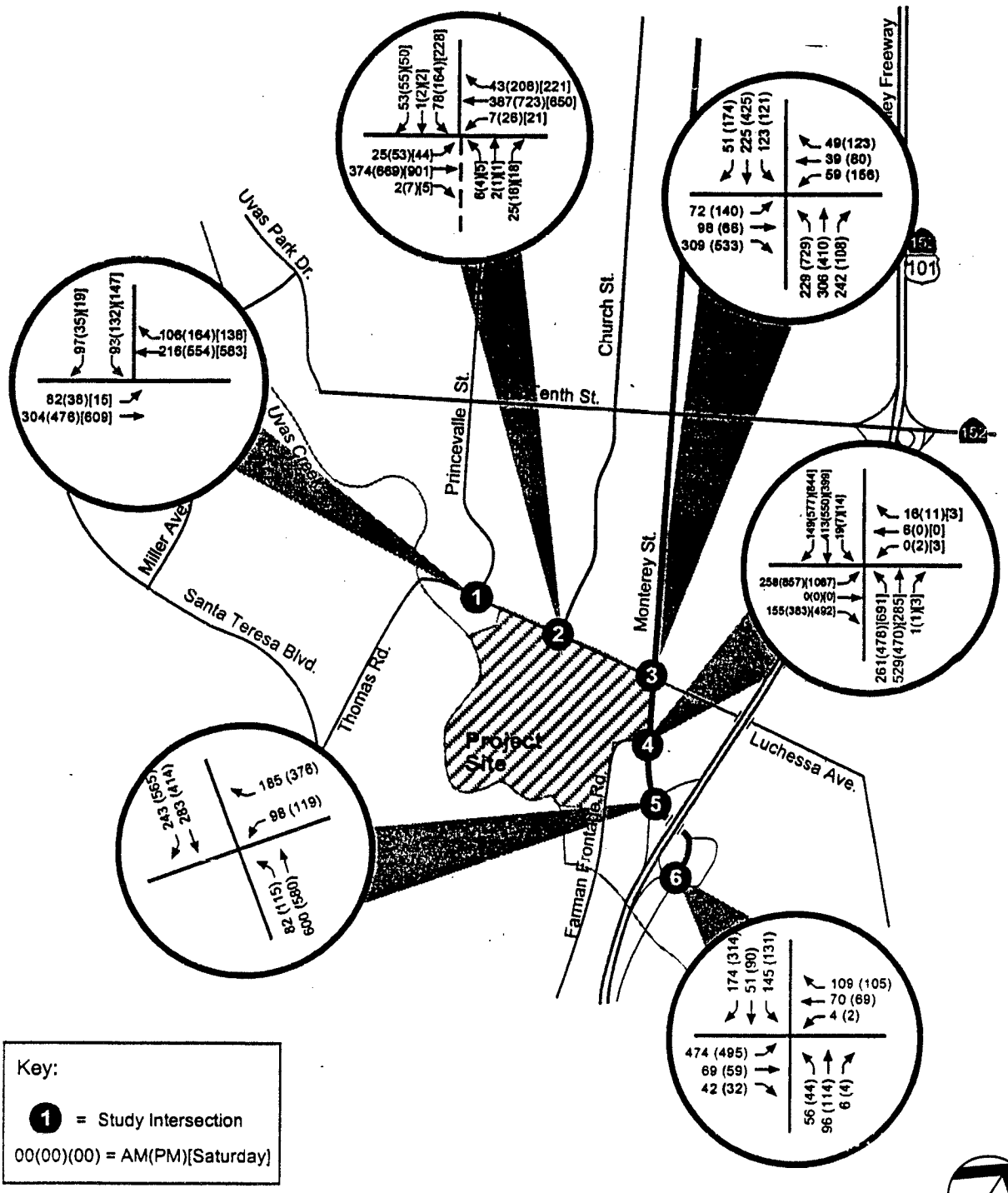

Source: Fehr and Peers Associates Inc.

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Background Plus Project Buildout Peak-hour Traffic Volumes

Figure 25

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Intersection/Scenario	Peak Hour	Average Delay[1]	LOS [2]
Monterey Street and Luchessa Avenue			
Background Conditions (Existing Conditions + Approved Projects)	AM PM	20.2 21.7	C C
Sports Park Phases I&II Conditions (Background Conditions + Park Phases I&II Traffic)	AM PM	20.3 22.0	C C
Sports Park Phase III Conditions (Phase II Conditions + Park Phase III Traffic)	AM PM	20.3 22.1	C C
Sports Park Phase IV Conditions (Phase III Conditions + Park Phase IV Traffic)	AM PM	20.3 22.5	C C
Sports Park Phase V Conditions (Phase IV Conditions + Park Phase V Traffic)	AM PM	20.4 22.8	C C
Sports Park Phase VI&VII Conditions (Phase V Conditions + Park Phases VI&VII Traffic)	AM PM	20.5 23.0	C C
Sports Park Phase VIII&IX Conditions[3] (Phase VI&VII Conditions + Park Phases VIII&IX Traffic)	AM PM	20.5 23.0	C C
Project Buildout Conditions (Sports Park, Residential and Commercial Traffic)	AM PM	22.5 67.4	C F
Monterey Street and US 101 Southbound Ramps			
Background Conditions (Existing Conditions + Approved Projects)	AM PM	12.7 13.9	B B-
Sports Park Phases I&II Conditions (Background Conditions + Park Phases I&II Traffic)	AM PM	12.8 14.1	B B-
Sports Park Phase III Conditions (Phase II Conditions + Park Phase III Traffic)	AM PM	12.8 14.2	B B-
Sports Park Phase IV Conditions (Phase III Conditions + Park Phase IV Traffic)	AM PM	12.8 14.4	B B-
Sports Park Phase V Conditions (Phase IV Conditions + Park Phase V Traffic)	AM PM	12.8 14.6	B B-
Sports Park Phase VI&VII Conditions (Phase V Conditions + Park Phases VI&VII Traffic)	AM PM	12.9 14.7	B B-
Sports Park Phase VIII&IX Conditions[3] (Phase VI&VII Conditions + Park Phases VIII&IX Traffic)	AM PM	12.9 14.7	B B-
Project Buildout Conditions (Sports Park, Residential and Commercial Traffic)	AM PM	13.9 16.1	B- C+

Source: Fehr and Peers Associates Inc.

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Background Plus Project Signalized Intersections LOS

Figure 26a

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Intersection/Scenario	Peak Hour	Average Delay[1]	LOS [2]
Monterey Street and US 101 NB Ramps			
Background Conditions (Existing Conditions + Approved Projects)	AM PM	20.2 20.8	C C
Sports Park Phases I&II Conditions (Background Conditions + Park Phases I&II Traffic)	AM PM	20.2 20.8	C C
Sports Park Phase III Conditions (Phase II Conditions + Park Phase III Traffic)	AM PM	20.2 20.7	C C
Sports Park Phase IV Conditions (Phase III Conditions + Park Phase IV Traffic)	AM PM	20.2 20.7	C C
Sports Park Phase V Conditions (Phase IV Conditions + Park Phase V Traffic)	AM PM	20.2 20.6	C C
Sports Park Phase VI&VII Conditions (Phase V Conditions + Park Phases VI&VII Traffic)	AM PM	20.2 20.6	C C
Sports Park Phase VIII&IX Conditions[3] (Phase VI&VII Conditions + Park Phases VIII&IX Traffic)	AM PM	20.2 20.6	C C
Project Buildout Conditions (Sports Park, Residential and Commercial Traffic)	AM PM	19.9 19.8	C C
Monterey Street and Farman Frontage Road[4]			
Sports Park Phase IV Conditions (Phase III Conditions + Park Phase IV Traffic)	AM PM Sat	11.8 16.0 18.1	B C+ C
Sports Park Phase V Conditions (Phase IV Conditions + Park Phase V Traffic)	AM PM Sat	11.9 18.3 20.5	B C C
Sports Park Phase VI&VII Conditions (Phase V Conditions + Park Phases VI&VII Traffic)	AM PM Sat	9.9 19.1 21.6	B C C
Sports Park Phase VIII&IX Conditions[3] (Phase VI&VII Conditions + Park Phases VIII&IX Traffic)	AM PM Sat	9.9 19.1 21.6	B C C
Project Buildout Conditions (Sports Park, Residential and Commercial Traffic)	AM PM Sat	23.5 703.5 2493.0	C- **F** **F**

Notes:
[1] Whole intersection weighted average delay expressed in seconds per vehicle.
[2] LOS calculations performed using the approved CMP level of service analysis program, TRAFFIX, which is based on the 1985 Highway Capacity Manual delay methodology for signalized intersections.
[3] These phases of the sports park include roadway and Uvas Creek Trail improvements. The park is not estimated to generate any additional traffic over Phase VI&VII conditions.
[4] This intersection is currently controlled by stop signs. The approved sports park project was conditioned to signalized this intersection prior to completion of Phase IV of the park. See Table 10b for LOS results for phases of the project prior to signalization.
LOS deficiencies are indicated in bold.

Source: Fehr and Peers Associates Inc.

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Background Plus Project Signalized Intersections LOS

Figure 26b

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Scenario	Peak Hour	Intersection		Worst Case Movement	
		Average Total Delay[1]	LOS [2]	Average Total Delay	LOS
Luchessa Avenue and Princevalle Street					
Background Conditions (Existing Conditions + Approved Projects)	AM	1.8	A	5.9	B
	PM	1.2	A	6.4	B
	Sat	0.9	A	5.4	B
Sports Park Phases I&II Conditions (Background Conditions + Park Phases I&II Traffic)	AM	1.8	A	5.9	B
	PM	1.3	A	6.9	B
	Sat	1.0	A	6.0	B
Sports Park Phase III Conditions (Phase II Conditions + Park Phase III Traffic)	AM	1.8	A	6.0	B
	PM	1.4	A	7.3	B
	Sat	1.0	A	6.5	B
Sports Park Phase IV Conditions (Phase III Conditions + Park Phase IV Traffic)	AM	1.9	A	6.0	B
	PM	1.5	A	8.1	B
	Sat	1.2	A	7.5	B
Sports Park Phase V Conditions (Phase IV Conditions + Park Phase V Traffic)	AM	1.9	A	6.0	B
	PM	1.6	A	9.2	B
	Sat	1.4	A	8.8	B
Sports Park Phase VI&VII Conditions (Phase V Conditions + Park Phases VI&VII Traffic)	AM	1.9	A	6.2	B
	PM	1.7	A	9.7	B
	Sat	1.5	A	9.4	B
Sports Park Phase VIII&IX Conditions[3] (Phase VI&VII Conditions + Park Phases VIII&IX Traffic)	AM	1.9	A	6.2	B
	PM	1.7	A	9.7	B
	Sat	1.5	A	9.4	B
Project Buildout Conditions (Sports Park, Residential and Commercial Traffic)	AM	2.1	A	7.7	B
	PM	4.7	A	35.5	E
	Sat	8.6	B	71.9	F
Luchessa Avenue and Church Street					
Background Conditions (Existing Conditions + Approved Projects)	AM	1.0	A	6.2	B
	PM	1.0	A	5.7	B
	Sat	0.9	A	4.2	A
Sports Park Phases I&II Conditions (Background Conditions + Park Phases I&II Traffic)	AM	1.0	A	6.3	B
	PM	1.1	A	6.5	B
	Sat	1.0	A	5.0	B
Sports Park Phase III Conditions (Phase II Conditions + Park Phase III Traffic)	AM	1.0	A	6.4	B
	PM	1.1	A	7.1	B
	Sat	1.1	A	5.7	B

Source: Fehr and Peers Associates Inc.

EMC Planning Group Inc.
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Gilroy USA Amendment 98-03 Subsequent EIR

Background Plus Project Unsignalized Intersections LOS

Figure 27a

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Scenario	Peak Hour	Intersection		Worst Case Movement	
		Average Total Delay[1]	LOS[2]	Average Total Delay	LOS
Sports Park Phase IV Conditions (Phase III Conditions + Park Phase IV Traffic)	AM	1.0	A	6.4	B
	PM	1.3	A	8.5	B
	Sat	1.3	A	7.3	B
Sports Park Phase V Conditions (Phase IV Conditions + Park Phase V Traffic)	AM	1.0	A	6.5	B
	PM	1.6	A	10.4	C
	Sat	1.6	A	9.4	B
Sports Park Phase VI&VII Conditions (Phase V Conditions + Park Phases VI&VII Traffic)	AM	1.1	A	6.8	B
	PM	1.7	A	11.3	C
	Sat	1.8	A	10.6	C
Sports Park Phase VIII&IX Conditions[3] (Phase VI&VII Conditions + Park Phases VIII&IX Traffic)	AM	1.1	A	6.8	B
	PM	1.7	A	11.3	C
	Sat	1.8	A	10.6	C
Project Buildout Conditions (Sports Park, Residential and Commercial Traffic)	AM	1.8	A	10.1	C
	PM	**73.3**	**F**	**>120**	**F**
	Sat	**263.6**	**F**	**>120**	**F**
Monterey Street and Farman Frontage Road					
Background Conditions (Existing Conditions + Approved Projects)	AM	0.5	A	9.3	B
	PM	0.7	A	16.4	C
	Sat	0.2	A	9.0	B
Sports Park Phases I&II Conditions (Background Conditions + Park Phases I&II Traffic)	AM	0.5	A	10.8	C
	PM	2.0	A	23.6	D
	Sat	1.3		13.8	C
Sports Park Phase III Conditions (Phase II Conditions + Park Phase III Traffic)	AM	0.6	A	11.8	C
	PM	3.4	A	**32.3**	**E**
	Sat	2.7	A	19.1	C

Notes:
[1] Average total intersection delay, expressed in seconds per vehicle.
[2] LOS calculations performed using the CMP level of service analysis program, TRAFFIX, and the *1994 Highway Capacity Manual* methodology for two-way stop-controlled intersections.
[3] These phases of the sports park include roadway and Uvas Creek Trail improvements. The park is not estimated to generate any additional traffic over Phase VI&VII conditions.
[4] This intersection is currently controlled by stop signs. The project proposes for this intersection to continue to be stop sign controlled until Phase VIII of the project when a signal will be constructed. See Table 10a for LOS results for sports park phases VII& IX and buildout of the project when the signal will be in place.
LOS deficiencies are indicated in bold.

Source: Fehr and Peers Associates Inc.

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy USA Amendment 98-03 Subsequent EIR

Background Plus Project Unsignalized Intersections LOS

Figure 27b

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West Luchessa Avenue/Church Street. The overall operations of the West Luchessa Avenue/Church Street intersection are projected to be acceptable through the final phase of the sports park. With the build-out of the project, overall intersection operations are projected to deteriorate to LOS F during the PM and Saturday peak hours. Operations during the AM peak hour are projected to continue to be LOS A. The worst approach is also projected to operate at acceptable levels through the final phase of the sports park (LOS B and C) and deteriorate to LOS F during the PM and Saturday peak hours with build-out of the residential and commercial parcels.

Monterey Street/Monterey Frontage Road. The approved sports park is required to install a traffic signal at the Monterey Street/Monterey Frontage Road intersection prior to completion of Phase IV of the sports park. Overall intersection operations at the intersection prior to signalization are projected to be acceptable through completion of Phase III of the sports park during AM, PM, and Saturday peak hours. The operations of the worst approach, eastbound Monterey Frontage Road, are projected to remain at acceptable levels during all three peak hours through the completion of Phase II of the sports park. With the completion of Phase III, this approach is projected to deteriorate to LOS E during the PM peak hour.

With signalization, the intersection of Monterey Street and Monterey Frontage Road is projected to operate at acceptable levels during the AM, PM and Saturday peak hours (with no lane additions) from Phase IV through the final phase of the sports park. With build-out of the commercial and residential parcels, the operations of this intersection are projected to deteriorate to LOS F during the PM and Saturday peak hours. Operations during the AM peak hour are projected to be LOS C, an acceptable operating level.

Roadway Segments Levels of Service. With the addition of project-generated traffic one of the four key segments is projected to operate at an unacceptable level: West Luchessa Avenue between Princevalle and Monterey Streets is projected to operate at LOS E with the addition of project build-out traffic. The remaining segments are projected to continue to operate at LOS C or better, acceptable levels based on the City of Gilroy standard. Roadway segment level of service is summarized in Figure 28.

Highway Segments Level of Service.

According to CMP 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. Nearby segments of U.S. Highway 101 were reviewed to determine if a significant amount of project traffic would be added to these freeway segment during the PM peak hour. (The segment of U.S. Highway 101 south of Monterey Street is a conventional highway [not freeway]. The CMP TIA guidelines do not specify a methodology for the analysis of multi-lane highway segments. Therefore, the freeway segment methodology was used to approximate the operating conditions on this segment.) Capacities of 2,200 vehicles per hour per lane (vphpl) for four-lane segments and 2,300 vphpl for freeway

segments with six or more lanes were used in the analysis. The project is estimated to add traffic that will exceed one percent of the capacity to all four of the nearby freeway segments. All of the segments are projected to operate at LOS B or C during the PM peak hour, which are acceptable levels of service.

Level of service calculations were conducted for the segment of State Highway 152 between U.S. Highway 101 and Frazier Lake Road using traffic volumes estimated for Project Conditions. Under Project Conditions, this segment is projected to operate at LOS E during both peak hours.

Impacts and Mitigation Measures

Thresholds of Significance. CEQA Guidelines Appendix G indicates that a project may have a significant effect on the environment if it will:

- cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system. This threshold is further defined as follows:

  ◊ At signalized intersections, a significant impact would occur when the addition of project traffic causes:

  a. Intersection operations to deteriorate from an acceptable level (LOS C or better) under Background Conditions to an unacceptable level (LOS D, E, or F); or

  b. Exacerbation of unacceptable operations (LOS D, E, or F) by increasing the critical movement delay by four or more seconds and increasing the volume-to-capacity (V/C) ratio by 0.01 or more.

  This definition is based on the VTA's definition of significant impact with definition of acceptable operating level set at LOS C (rather than the CMP LOS E standard).

  ◊ At unsignalized intersections, a significant impact would occur when the addition of project traffic causes:

  a. Overall intersection operations to deteriorate from an acceptable level (LOS C or better) under Background Conditions to an unacceptable level (LOS D, E, or F); or

  b. Worst case approach operations to deteriorate from LOS D or better to LOS E or F.

- substantially increase hazards due to a design feature or incompatible uses;
- result in inadequate emergency access; and/or
- conflict with adopted policies, plans or programs supporting alternative transportation.

Segment	Roadway Type[1]	LOS C Volume Threshold (vpd[2])	Background		Project	
			Weekday Daily Volume	LOS	Weekday Daily Volume	LOS
Luchessa Avenue, Thomas Road to Princevalle St.	2-Lane Arterial	14,500	5,060	A	11,100	B
Luchessa Avenue, Princevalle St. to Monterey St.	2-Lane Arterial	14,500	6,880	A	**17,540**	**E**
Monterey Street, Tenth St. to Luchessa Ave.	4-Lane Divided Arterial	29,000	9,800	A	13,060	A
Monterey Street, Luchessa Ave to US 101	4-Lane Divided Arterial	29,000	13,300	A	26,940	C

Note: [1] Roadway type of Luchessa Avenue based on classification in 1998 and 1999 City of Gilroy Traffic Monitoring Program reports. Monterey Street roadway type based on field observations.
[2] Vehicles per day.
LOS deficiencies are indicated in **bold**.

Source: Fehr and Peers Associates Inc.

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy USA Amendment 98-03 Subsequent EIR

Background Plus Project Roadway Segments LOS

Figure 28

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Project Traffic Impacts

The proposed project will have a significant adverse impact on four of the six key intersections studied in the TIA:

- West Luchessa Avenue and Princevalle Street;
- West Luchessa Avenue and Church Street;
- Monterey Street and Luchessa Avenue; and
- Monterey Street and Monterey Frontage Road.

The proposed project will also have a significant adverse impact on one of the four roadway segments studied in the TIA:

- Luchessa Avenue between Princevalle Street and Monterey Street.

Mitigation Measure Implementation Timing

The approved sports park is not expected to build out for approximately 20 years and there are no proposals for development of the commercial parcels at this time. A residential development is in the RDO process and it is possible that the residential portion of the project site could be developed within the next several years. The proposed residential portion of the project would generate significantly less traffic than the commercial portion of the project and the sports park.

Because the timing for actual development of the project site is not known, and the build-out of the proposed project is likely to involve several separate developments, implementation of the mitigation measures would be dependant upon conditions at the approval of the individual projects. Project-specific environmental review and traffic analysis would be required to determine when each of the identified mitigation measures would be required to be implemented and who the responsible party for implementation would be.

Less Than Significant Impact—West Luchessa Avenue/Princevalle Street. The addition of project traffic to the West Luchessa Avenue/Princevalle Street intersection causes the worst approach to deteriorate from LOS B to LOS E during the PM peak hour and from LOS B to LOS F during the Saturday peak hour. The estimated PM and Saturday peak-hour traffic volumes at the West Luchessa Avenue/Princevalle Street intersection satisfy the Caltrans Peak Hour Volume warrant for traffic signal installation under Project Build-out Conditions. The operation of this intersection would improve to LOS B during AM, PM, and Saturday peak hours with the installation of a traffic signal with two-phase operation and the existing lane configuration. This signalization is already included in the City's Capital Improvement Budget, and is programmed for implementation in 2001 or 2002. Because planned improvements would reduce potential impacts to a less than significant level, no mitigation measure is required.

Significant Impact—West Luchessa Avenue/Church Street. The addition of project traffic to the West Luchessa Avenue/Church Street intersection would cause both overall intersection operations and the worst approach to deteriorate from acceptable operating levels to LOS F during both the PM and Saturday peak hours.

The Caltrans Peak Hour Volume warrant requirements are also satisfied for the intersection of West Luchessa Avenue and Church Street during the PM and Saturday peak hours under Project Build-out Conditions. The proposed project's impact at this intersection would be reduced to a less than significant level with the implementation of the following mitigation measure. With implementation of this mitigation measure the intersection is projected to operate at LOS B during the AM, PM, and Saturday peak hours under Project Build-out Conditions.

Mitigation Measure

20. The following street improvements shall be made to the intersection of West Luchessa Avenue and Church Street:

    - installation of a traffic signal with two-phase operation;
    - re-configuration of the northbound and southbound approaches as necessary to provide one approach lane for all movements;
    - provision of one left-turn lane and one shared through and right-turn lane on the eastbound and westbound approaches.

    The street improvements shall be implemented at such time as determined by the City of Gilroy traffic-monitoring program or a project -specific traffic analysis, and at such time as to prevent the deterioration of traffic operations below acceptable levels. Construction of the improvements shall be required as a condition of approval for the applicable project. Improvements may be subject to a reimbursement agreement.

Significant Impact—Monterey Street/Luchessa Avenue. The intersection of Monterey Street and Luchessa Avenue is projected to degrade from LOS C to LOS F during the PM peak hour with the addition of project-generated traffic. Implementation of the following would reduce this impact to a less than significant level.

Mitigation Measure

21. The following street improvements shall be made to the intersection of Monterey Street and Luchessa Avenue:

    - construction of a second northbound left-turn lane and an exclusive eastbound right-turn lane;

- addition of a right-turn arrow for the eastbound right-turn movement (so vehicles in this movement could move while the northbound left-turn movement has a green arrow).

The street improvements shall be implemented at such time as determined by the City of Gilroy traffic-monitoring program or a project -specific traffic analysis, and at such time as to prevent the deterioration of traffic operations below acceptable levels. Construction of the improvements shall be required as a condition of approval for the applicable project. Improvements may be subject to a reimbursement agreement.

Significant Impact—Monterey Street/Monterey Frontage Road. The operation of the Monterey Street/Monterey Frontage Road intersection is projected to deteriorate from acceptable level under Background Conditions to LOS F during the PM and Saturday peak hours with the addition of project traffic and construction of the proposed traffic signal.

The approved sports park project is required to install a traffic signal at the Monterey Street/Monterey Frontage Road intersection prior to completion of Phase IV of the sports park. Depending on the timing of the construction of the commercial components of the proposed project, installation of this traffic signal may be required prior to completion of Phase III of the sports park and additional improvements to this intersection be may be necessary.

With the development of the commercial parcels, additional turn lanes would be needed to serve traffic entering and exiting the shopping center. Two exclusive southbound right-turn lanes, two northbound left-turn lanes and widening of the eastbound approach would be needed to serve the projected volumes.

Street improvements would need to be coordinated with future plans to widen Monterey Street to six lanes. The recommended lane configurations may require widening on the west side (beyond that planned by the City) to provide one or both southbound right-turn lanes and possibly the second northbound left-turn lane. The northbound left-turn lane may be able to be added with median modifications alone.

The improvements to the Monterey Frontage Road leg of the intersection would require substantial widening on Monterey Frontage Road, which is currently 50 feet wide at the intersection and narrows to 30 feet approximately 100 feet west of Monterey Street. The TRAFFIX design queues estimated for the Monterey Frontage Road approach to its intersection with Monterey Street indicate that a 250-foot right-turn pocket and two 475-foot left-turn pockets will be needed to accommodate the projected queues. It is also recommended that the second westbound lane on Monterey Frontage Road (to accommodate the second northbound left-turn lane from Monterey Street) be continued to the sports park entrance road, approximately 600 feet from the intersection. Monterey Frontage Road currently curves to the south just west of its intersection with Monterey Street. Some realignment of the roadway may be necessary (Monterey Frontage Road may need to be extended

farther to the west before it curves to the south) to provide adequate turning radii at its intersection with Monterey Street. Feasibility of the improvements to Monterey Frontage Road and its intersection with Monterey Street is subject to more detailed engineering studies.

Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

22. Following or in conjunction with the signalization of the intersection of Monterey Street and Monterey Frontage Road, the following street improvements shall be made:

    - re-configuration of the southbound approach as necessary to provide one left-turn lane, two through lanes, two right-turn lanes;
    - re-configuration of the westbound approach as necessary to provide one shared lane for all movements;
    - re-configuration of the northbound approach as necessary to two left-turn lanes, one through lane, one shared through/right- turn lane;
    - re-configuration of the eastbound approach as necessary to provide one exclusive left-turn lane, one shared through and left-turn lane, and one right-turn lane.
    - right-turn arrows shall be provided for the eastbound and southbound right-turn movements to provide LOS C intersection operations during all three study periods. This lane configuration will require split phase operation of the eastbound and westbound approaches.

    The street improvements shall be implemented at such time as determined by the City of Gilroy traffic-monitoring program or a project -specific traffic analysis, and at such time as to prevent the deterioration of traffic operations below acceptable levels. Construction of the improvements shall be required as a condition of approval for the applicable project. Improvements may be subject to a reimbursement agreement.

Significant Impact—Luchessa Avenue Roadway Segment. With the addition of project-generated traffic, one of the key roadway segments is projected to deteriorate to an unacceptable level of service. The segment of West Luchessa Avenue between Princevalle Street and Monterey Street is projected to degrade from LOS A to LOS E, an unacceptable level based on the City of Gilroy standard. This is considered a significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

23. A right-of-way sufficient for a six-lane arterial shall be dedicated to the City of Gilroy along the West Luchessa Avenue frontage of the project site.

    The dedication shall be implemented at such time as determined by the City of Gilroy traffic-monitoring program or a project -specific traffic analysis. The dedication shall be implemented at such a time as to allow construction necessary to prevent the deterioration of traffic operations below acceptable levels.

24. West Luchessa Avenue shall be widened to four lanes between Monterey Street and Princevalle Street.

    The street improvements shall be implemented at such time as determined by the City of Gilroy traffic-monitoring program or a project -specific traffic analysis, and at such time as to prevent the deterioration of traffic operations below acceptable levels. Construction of the improvements shall be required as a condition of approval for the applicable project. Improvements may be subject to a reimbursement agreement.

Less Than Significant Impact—U.S. Highway 101. The proposed project is estimated to add traffic that will exceed one percent of the capacity to all four of the nearby freeway segments. All of the segments are projected to operate at LOS B or C during the PM peak hour, acceptable levels of service. Therefore, the project impact on these segments is less than significant and no mitigation measures are necessary.

2.15 Issues Determined to Have Less Than Significant Impacts

Mineral Resources

The project site is not a known location of valuable mineral resources. The proposed project would have no impacts on mineral resources.

Population and Housing

The proposed project would result in approximately 150 new housing units within the City of Gilroy and would add approximately 500 people to the population. The proposed commercial area would provide additional jobs. The proposed project would have no significant adverse effects on population or housing. The City of Gilroy is preparing a fiscal impact analysis for the proposed project.

Recreation

The approved but not yet built Gilroy Sports Park is located on the project site and the Uvas Creek Trail extends east from the project site. A neighborhood park is part of the project description. The proposed project would have a less than significant impact on existing recreational facilities and would not require the construction of any new facilities off the project site that might result in environmental impacts.

3.0 Related Environmental Issues

3.1 Unavoidable Significant Adverse Environmental Impacts

An unavoidable significant adverse environmental impact is a significant adverse impact that cannot be reduced to a less than significant level through the implementation of mitigation measures. CEQA Guidelines section 15093 requires that a lead agency make findings of overriding considerations for unavoidable significant adverse environmental impacts before approving a proposed project.

The loss of prime farmland is generally considered a significant and unavoidable adverse environmental impact. The proposed project would result in the loss of the 54.85 acres of prime farmland (though some of this land is used for commercial and residential farm-related uses). The USA amendment request also includes the approved Gilroy Sports Park. The sports park was approved by the City of Gilroy on June 7, 1999. Development of the sports park will result in a loss of 78.36 acres of prime farmland. In all, the USA amendment area, including the proposed project and the previously approved project, encompasses 133.21 acres of prime farmland. The loss of prime farmland is discussed in Section 2.2 Agricultural Resources.

The establishment of the Gilroy Agricultural Lands Area by both the City of Gilroy and the County of Santa Clara serves as a regional mitigation for losses of prime farmland outside of the agricultural lands area in southern Santa Clara County. Although this regional mitigation has been implemented, it does not serve to reduce the loss of prime farmland to a less than significant level and the proposed project would still be considered to have a significant and unavoidable impact on prime farmland.

CEQA Guidelines section 15093(a) requires the decision-making agency (the City of Gilroy, as well as the Santa Clara County LAFCo) to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable." CEQA Guidelines section 15093(b) states that when the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

3.2 Cumulative Impacts

CEQA Requirements

CEQA Guidelines section 15130 requires a discussion of the significant cumulative impacts associated with the proposed project. A cumulative impact is an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. CEQA Guidelines section 15130(b) requires the following:

> The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the effects attributable to the project alone. The discussion should be guided by the standards of practicality and reasonableness and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact...

CEQA requires a cumulative development scenario to consist of either a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or, a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

When based on a list of past, present, and probable future projects, factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. "Probable future projects" may be limited to those requiring an agency approval for an application which has been received at the time the notice of preparation is released, unless abandoned by the applicant; projects included in an adopted capital improvements program, general plan, regional transportation plan or other similar plan; projects included in the summary of projections of projects (or development areas designated) in a general plan or a similar plan; projects anticipated as later phases of a previously approved project; or those public agency projects for which money has been budgeted.

The geographic area affected by the identified cumulative impacts, and an explanation of the basis of the geographic scope used in analyzing cumulative impacts, must be presented.

Cumulative Conditions Basis

Cumulative conditions used for the proposed project include existing development, approved but not yet built projects, and probable projects in the southern part of

Gilroy. Traffic from the proposed project was anticipated to have a potentially significant impact on the local area, and to be likely to contribute with other projects towards significant cumulative impacts. Southern Gilroy was selected as the area of study for cumulative impacts because traffic from the proposed project would most affect southern Gilroy. Approved, but not yet constructed, projects are included in the cumulative analysis summarized in Table 10.

TABLE 10

Cumulative Projects in the Vicinity of the Project Site

Projects	Use and Size
Thomas Rd Prop	75 single-family homes
Architectural Facades Manufacturing	4.47 acres industrial
Carls Junior	3,700 square-foot restaurant
Fibertech	68 employees (industrial)
Jeffries Restaurant	5,500 square foot restaurant
Presbyterian Church	8 single-family residential units
Fortino	28 single-family residential units
Kmart Building Re-Use	100,000 square-foot retail store
Obata Industrial Park	10 acres of industrial remain to be developed
Pacific Coast Recycling	2.8 acres industrial
Eagle Ridge	550 single-family and townhouse units, 18-hole golf-course
Rocha Industrial Building	25,665 Square-foot industrial
The Uplands	58 single-family residential units
Ramada Hotel	
Hilton Garden Inn	113 rooms
Gilroy Cinemas	8 screen 1,100 seat theater

Source: Fehr and Peers Associates, Inc. and City of Gilroy

Investigation indicates that the proposed project would or may make significant contributions to cumulative impacts in the areas of agricultural resources, air quality hydrology, and transportation/circulation. The project is unlikely to have potentially significant cumulative impacts in the areas of aesthetics, biological resources, cultural resources, geology, noise or public services.

Agricultural Resources

Land that is within the USA is either currently provided with urban services such as water and sewer, or is planned to have such services within an approximate five-year timeframe. Inclusion of Prime Farmland within an USA invariably means that the farmland will be lost to agricultural use within a matter of years. Prime farmland is a non-replaceable resource. Each project that involves the conversion of prime farmland to non-agricultural uses contributes to the depletion of this resource.

Approval of the USA amendment and development of parcels adjacent to the sports park site would result in the loss of 54.85 acres of designated prime farmland. Approximately 49.85 acres of this farmland would be converted from agricultural production. Commercial and utility uses occupy 0.8 acres and rural residential, agricultural structures and yards occupy approximately 4.2 acres of the project site's Prime Farmland. The USA amendment request also includes the approved Gilroy Sports Park. The sports park was approved by the City of Gilroy on June 7, 1999 resulting in a loss of 78.36 acres of prime farmland. In all, the USA amendment area, including the proposed project and the previously approved project, encompasses 133.21 acres of prime farmland. Approximately 128.21 acres of this farmland would be converted from agricultural production.

The proposed project, sports park and cumulative projects together would convert over 550 acres of prime farmland to non-agricultural uses. The conversion of prime farmland would be a significant cumulative environmental impact. Approximately 1,900 acres of prime farmland were converted to non-agricultural uses in Santa Clara County from 1990 to 1995 (California Department of Conservation 1996 and Santa Clara County 1994). This represents a loss of approximately 5.4 percent of the total prime farmland that existed in Santa Clara County in 1990. The proposed project would transfer approximately 0.4 percent of the remaining prime farmland in the county into the City of Gilroy USA.

The establishment of the Gilroy Agricultural Lands Area serves as partial mitigation for development elsewhere on the region's prime farmlands, however, this mitigation does not replace the converted prime farmland. This conversion of valuable agricultural land to non-agricultural uses is a significant environmental impact.

Air Quality

The BAAQMD does not set a specific threshold for cumulative mobile-source emission increases in local jurisdictions. It is assumed that the cumulative projects will exceed BAAQMD project-specific thresholds for at least one pollutant. The individual projects when analyzed together are anticipated to result in a significant cumulative impact on air quality.

On July 10, 1998, the U.S. Environmental Protection Agency changed the San Francisco Bay Area's classification for national 1-hour ozone standard from a "maintenance" area to an "unclassified nonattainment" area. The re-designation

action is EPA's formal recognition that the region has had recent violations of the national ambient air quality standard for ozone. The notice required San Francisco Bay Area co-lead agencies to prepare a revision to the State Implementation Plan (SIP), a compilation of plans and regulations that govern how the region complies with the Federal Clean Air requirements. In response, the *1999 Ozone Attainment Plan* was adopted by the BAAQMD in June 1999. The plan presents a strategy for re-establishing an ozone attainment record in the future. This plan is discussed in Section 2.3 Air Quality.

According to the *BAAQMD CEQA Guidelines*, general plans, master plans, annexations and similar projects, such as the proposed project, are considered to have a less than significant cumulative air quality impact if they are consistent with the *Clean Air Plan*. They are judged for consistency with the *Clean Air Plan* based on use of consistent population projections. According to the *Draft EIR for the City of Gilroy 1999-2000 General Plan* the proposed general plan population projections are consistent with the Association of Bay Area Government 1996 forecast, which was used in developing the 1997 *Clean Air Plan*. Therefore the proposed general plan is consistent with the *Clean Air Plan*. The proposed project is consistent with the proposed general plan, therefore the proposed project is consistent with the *Clean Air Plan* and no significant cumulative impact results.

Hydrology

Urban development in the Pajaro River watershed has resulted in the covering of many acres of permeable land with impermeable surfaces such as pavement and structures. Essentially none of the rainfall that hits impervious surfaces is absorbed into the surfaces on which it falls. When rainfall lands on these impermeable surfaces, it drains on the surface and eventually into a drainage pipe or watercourses. Storm water in the Pajaro River watershed that is not absorbed into the soil or retained in reservoirs eventually makes its way into the Pajaro River. Storm water drainage is discussed in Section 2.7 Hydrology and Flooding.

Under certain storm conditions increases in the amount of area covered in impervious materials results in increased rates of run-off into streams. The increased rate of storm water run-off can result in higher flows in streams and in a more rapid rise in streams' water levels. Increased flows in streams often result in local or widespread flooding in areas adjacent to the stream. Two major floods have occurred in the lower reaches of the Pajaro River in the past several years, resulting in extensive property damage and displacement of residents. However, according to Schaaf and Wheeler, (personal communication April 12, 1999), due to the location of the project site within the Uvas Creek watershed, the peak flow in Uvas Creek at the project site occurs hours after the peak rainfall. Therefore, the site soils would be saturated and the surface storage would be filled by prior rainfall at the time of the peak flows in Uvas Creek. Run-off rates on impervious surfaces are not significantly different than from saturated pervious surfaces. The minimum infiltration capacity for typical soils in the Gilroy area range from 0.05 inches per hour for heavy clays to 0.20 cubic inches per hour for loam soils. For the proposed project, this represents

approximately a 7.6 cubic feet per second difference in runoff, assuming 37.7 acres of impervious area (27.7 acres of residential, less 1.5 acres of park times 60 percent coverage, plus, 27.1 acres of commercial times 80 percent coverage) and an infiltration rate of 0.20 inches per hour.

On a cumulative basis, the proposed and approved projects include sites in hillside areas with shallow clay soils that would have even lower minimum infiltration capacities than the project site. The potential cumulative impact would be less than 0.3 percent increase in the 10-year flood flow of 5,500 cubic feet per second, which does not overflow the channel, and an increase of 0.1 percent in the 100-year flow of 14,000 cubic feet per second. This would not be a significant increase in the flood flows or result in a significant increase in flood elevations for Uvas Creek.

For downstream areas, including Pajaro River, the potential increases would be even smaller due to the larger existing flows and the extensive flood plain storage in the Soap Lake area downstream of Monterey Street near the Llagas Creek confluence.

Transportation/Circulation

This section presents the results of the level of service calculations under Cumulative Conditions in the Transportation Impact Analysis prepared for the proposed project. Cumulative Conditions are defined as existing volumes plus traffic generated by approved but not yet constructed developments in the project study area, plus traffic generated by the proposed project, plus traffic associated with other proposed but not approved developments in the study area. Table 10, presented earlier, lists proposed but not approved projects included in the Cumulative Conditions. Project level transportation issues are discussed in Section 2.14, Transportation/ Circulation.

Cumulative Traffic Estimates

Traffic volumes for Cumulative Conditions were estimated by adding traffic associated with pending developments to traffic volumes estimated for Project Conditions. Pending developments in the study area include the re-use of the Kmart building (100,000 square feet of retail space) and additional development in the Obata Industrial Park. Traffic volumes for these developments were estimated in a manner similar to the traffic projections for approved developments. Trip generation rates were estimated from ITE *Trip Generation* and assigned to the roadway network based on existing travel patterns, relative locations of complementary land uses, and trip distribution patterns contained in the Gilroy traffic monitoring program TRAFFIX model.

Cumulative Intersection Levels of Service

The operations of the key intersections were evaluated with level of service calculations. The intersection of Monterey Street and Farman Frontage Road, at which a traffic signal is proposed as part of the Gilroy Sports Park, was assumed to be signalized under Cumulative Conditions.

Under Cumulative Conditions, the intersection of Monterey Street and West Luchessa Avenue is projected to operate at LOS F during the PM peak hour and the intersection of Monterey Street and Farman Frontage Road is projected to operate at LOS F during the PM and Saturday peak hours. These intersections are projected to operate at LOS C during the AM peak hour. The remaining signalized intersections, Monterey Street at U. S. Highway 101 southbound ramps and U. S. Highway 101 northbound ramps, are projected to continue to operate at LOS B or C during both the AM and PM peak hours.

The unsignalized intersection of West Luchessa Avenue and Princevalle Street is projected to continue have overall acceptable intersections operations during AM, PM, and Saturday peak hours, while the worst case approach is projected to operate at LOS F during the PM and Saturday peak hours, similar to Project Conditions. Overall intersection operations at the West Luchessa Avenue/Church Street intersection are projected to be LOS A during the AM peak hour and LOS F during the PM and Saturday peak hours. The worst case approach is projected to operate at LOS C during the AM peak hour and LOS F during the PM and Saturday peak hours.

Under Cumulative Conditions several intersections would operate at unacceptable levels of service. However, mitigation measures identified for the Project Conditions would also mitigate cumulative impacts to a less than significant level. Intersection operations would be improved to LOS C with implementation of the previously identified mitigation measures.

Cumulative Roadway Segment Levels of Service

Three of the four key roadway segments are projected to continue to operate at acceptable levels. However, the segment of West Luchessa Avenue between Monterey Street and Princevalle Street is projected to deteriorate to LOS F with the addition of traffic associated with pending developments. This compares to LOS A under Existing and Background Conditions and LOS E under Project Conditions. Mitigation measures identified for the project conditions would also mitigate cumulative impacts on this roadway segment. Widening West Luchessa Avenue to four lanes would provide adequate capacity to serve cumulative volumes as well as project volumes.

3.3 Significant Irreversible Environmental Changes

The proposed project would result in the permanent loss of prime agricultural land. While this loss is mitigated in part by the establishment of the Gilroy Agricultural Lands Area, the prime agricultural land lost to the proposed project is not replaceable. The loss of prime agricultural land would be a significant irreversible change.

3.4 Growth Inducing Impacts

Growth inducement refers to the likelihood that a proposed project will foster growth in the surrounding area, either directly or indirectly. The most common factor in fostering growth is the removal of obstacles to population or economic growth. CEQA Guidelines section 15126.2 requires a discussion of the growth-inducing impacts of a proposed project. Potential growth-inducing impacts must be discussed in relation to both the potential impacts on existing community service facilities and the way a project may encourage and facilitate other activities that could significantly affect the environment. It must not be assumed that growth in any area is necessarily beneficial, detrimental or of little significance to the environment.

The proposed project itself is an extension of urban services into a previously un-served area. Although all urban service infrastructure is currently available near the project site, the approval of the USA amendment would make that infrastructure available to the project site itself and would result in future growth and development in that area.

The project site is currently within the City of Gilroy 20-year development area. The proposed project would transfer the project site into the City of Gilroy USA. Provision of urban services and development within a USA is generally expected to occur within an approximate five-year timeframe. The Gilroy Sports Park has previously been approved for a portion of the project site, and a residential development is undergoing the RDO process for the northern portion of the project site. Approval of the USA amendment request would encourage and facilitate development within the project site.

Extension of services to the southern parcels on the project site and development of these parcels could result in development pressure on the land south of the project site. Although this area is designated in the *Draft Gilroy 1999-2020 General Plan* as OPEN SPACE, the landowners may request a USA amendment and a change in general plan designation to open their land to development. Similar pressures may be felt to the west of Uvas Creek where a finger of land less than one-half mile wide would remain outside the Gilroy USA. These areas were included in the *Water Master Plan* and the *Sewer Master Plan*. The proposed project's vicinity and relationship to the existing USA is illustrated in Figure 2 and Figure 10, presented in Section 1.

3.5 Alternatives

CEQA Guidelines section 15126.6 (a) requires a description of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and an evaluation the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project, but must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. CEQA Guidelines section 15126.6 (b) further requires that the discussion of alternatives focus on those alternatives capable of eliminating any significant adverse environmental impacts or reducing them to a level of insignificance, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.

The following project alternatives were analyzed:

- Alternative #1 "No Project" alternative; The USA request is not approved by Santa Clara County LAFCo and no development takes place on the portion of the project site outside the sports park. The approved sports park is developed outside the urban service area at its approved location.

- Alternative #2 Reduced Project Size alternative; The USA request is reduced by 15.01 acres by eliminating the four parcels located south of the sports park access road. The resulting project site has a total of 125.20 acres, with 27.72 acres of proposed residential area and 12.12 acres of proposed commercial area. The sports park is added to the USA as part of this alternative.

- Alternative #3 Alternative Site alternative; A USA amendment is made on the west side of Monterey Street at Day Road in northern Gilroy. The project has approximately 25 acres of proposed residential area and 25 acres of proposed commercial area. The approved sports park is developed outside the USA at its already approved location.

Alternative #1 ("No Project")

CEQA Guidelines section 15126.6 (e) stipulates that the "No Project" alternative be evaluated along with its impacts. The "No Project" alternative analysis must discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

The "No Project" alternative occurs if Santa Clara County LAFCo denies the City of Gilroy request for a USA amendment for the project site. In this circumstance, no development would take place on the portion of the project site that is outside the sports park. Sports park development would proceed as planned and approved. The approved sports park would be developed outside the USA.

The *City of Gilroy General Plan* and the *Santa Clara County General Plan* both require that only land within the city limits be developed. Land that is annexed to the city must already be within or concurrently added to the city's USA. The USA is that area which is currently developed or expected to be developed within an approximate five-year time period. The project site is currently within the city's planning area and 20-year growth boundary, but outside the city limits and USA. Under the "No Project" alternative, the project site would remain in the jurisdiction of Santa Clara County. The *Santa Clara County General Plan* land use designation is OPEN SPACE RESERVE, which is an interim designation for land for which the ultimate use has not been established.

Aesthetics

With the "No Project" alternative, the land surrounding the sports park would remain in agricultural fields indefinitely, preserving the rural atmosphere of the project site. The "No Project" alternative would have no impact on aesthetics. The "No Project" alternative is superior to the proposed project in terms of aesthetics.

Agricultural Resources

Under the "No Project" alternative, the portions of the project site outside the sports park site would remain in agricultural production for an indefinite period of time. The 54.5 acres of prime farmland would remain in its current uses. The "No Project" alternative is superior to the proposed project in terms of agricultural resources. The approved sports park would still result in the loss of 78.36 acres of prime agricultural land to non-agricultural uses.

Air Quality

The "No Project" alternative would result no additional emissions from vehicular trips. The "No Project" alternative would not result in emissions in excess of BAAQCB thresholds. The "No Project" alternative is superior to the proposed project in terms of air quality.

Biological Resources

The "No Project" alternative would have no impact on any sensitive habitat or wildlife. The proposed project has the potential to have significant impacts on special-status species. The "No Project" alternative is superior to the proposed project in terms of biological resources.

Cultural Resources

The "No Project" alternative would retain the proposed residential and commercial land in agriculture and it is unlikely that any unknown buried cultural resources

would be disturbed. The "No Project" alternative would have no impact on cultural resources. The "No Project" alternative is superior to the proposed project in terms of cultural resources.

Geology

There would no geologic impacts under the "No Project" alternative since no building would take place, other than that already approved at the sports park. The "No Project" alternative is superior to the proposed project in terms of geologic hazards.

Hydrology

The "No Project" alternative would not result in any coverage of pervious surfaces and would have no impact on the quantity or quality of storm water run-off or discharge of urban pollutants into surface waters. The "No Project" alternative is superior to the proposed project in terms of hydrology.

Noise

The "No Project" alternative would not place residences in an area where ambient noise levels exceed City standards for residential land use. There would be no noise impacts from athletic activities at the sports park or from traffic on Monterey Street and West Luchessa Avenue. The "No Project" alternative is superior to the proposed project in terms of noise.

Fire Protection Services

Under the "No Project" alternative (existing jurisdictional boundaries), the SSCCFD would continue to serve the project site, including the Gilroy Sports Park when it is built. There would be no commercial and residential development on the project site so the level of fire protective services required would be less. The "No Project" alternative is the superior project in terms of fire protective services.

Police Protection Services

With the "No Project" alternative Santa Clara County would continue to provide police services to the project site including the Gilroy Sports Park, when it is built. There would be no commercial or residential development on the project site so the level of police services required would be less. The "No Project" alternative is the superior project in terms of police protective services.

Water Supply

With the "No Project" alternative 54.85 acres of the project site would remain in agricultural use. Water use on the 54.85 acres would be an estimated 135.9 acre-feet per year. This is approximately 45.1 acre-feet more water per year than would be used with the proposed project. The "No Project" alternative uses significantly more water than the proposed project. The "No Project" alternative is inferior to the proposed project.

Wastewater

The "No Project" alternative would not generate any wastewater for the wastewater treatment plant. The "No Project" alternative would have no impact on the wastewater system. The "No Project" alternative is superior to the proposed project in terms of impacts on the wastewater system.

Transportation/Circulation

The "No Project" alternative would not add any vehicular trips to the roadway network. The "No Project" alternative would have no impact on traffic. The "No Project" alternative would be superior to the proposed project.

Alternative #2 (Reduced Project Size)

The Reduced Project Size alternative would remove four parcels from the project site. The four parcels located south of the sports park access road and designated COMMERCIAL – GENERAL SERVICES would be eliminated from the project and remain in their current uses. These parcels are APNs 808-21-027, 808-21-013, 808-21-014 and 808-21-015.

The Reduced Project Size alternative would have a total acreage of 126.2 acres. Residential uses would remain on the 27.72-acre area proposed for RESIDENTIAL – NEIGHBORHOOD DISTRICT and there would be 12.12-acres of commercial uses north of the sports park access road on land designated COMMERCIAL – GENERAL SERVICES in the *Draft Gilroy 1999-2020 General Plan*.

The Reduced Project Size alternative would result in a reduction in impacts, especially in loss of agricultural land, potential flooding, and traffic complications (particularly at the Farman Frontage/Monterey Street intersection). The parcels removed from the proposed project are not necessary to maintain a contiguous boundary to the USA. Additional parcels to the north of the sports park access road were not eliminated from the project for the Reduced Project Size alternative because this would result in a "hole" in the USA.

Aesthetics

The Reduced Project Size alternative would involve fewer commercial buildings and the character of the project site would change less. However, the impact to the visual character would remain less than significant. The Reduced Project Size alternative would be slightly superior to the proposed project in terms of aesthetics.

Agricultural Resources

The Reduced Project Size alternative would result in a 15.01-acre total reduction in conversion of Prime Farmland to non-agricultural uses, although approximately two acres of this difference is already in non-agricultural production. The Reduced Project Size alternative is superior to the proposed project in terms of agricultural considerations. The approved sports park would still result in the loss of 78.36 acres of prime agricultural land to non-agricultural uses.

Air Quality

The Reduced Project Size alternative would be consistent with the *Draft Gilroy 1999-2000 General Plan* and therefore consistent with the BAAQMD *Clean Air Plan*. The Reduced Project Size alternative would therefore have a less than significant impact on air quality. The Reduced Project Size alternative would also result in fewer vehicular trips and reduced emissions. The Reduced Project Size alternative would be superior to the proposed project in terms of air quality.

Biological Resources

The Reduced Project Size alternative would remove 15.01 acres of agricultural land with no biological resource value from the project site. Potential biological impacts would remain on the remainder of the project site. Biological resource issues with the Reduced Project Size alternative would be similar to those at the project site. The Reduced Project Size alternative and the proposed project are approximately equal in terms of biological resources.

Cultural Resources

The Reduced Project Size alternative has the same archaeological issues as the proposed project. However, the Reduced Project Size alternative would result in the elimination of only two of the four potentially historic structures on the proposed project site. The Reduced Project Size alternative is slightly superior to the proposed project.

Geology

There would be no unusual geologic impacts associated with either the Reduced Project Size alternative or the proposed project. The Reduced Project Size alternative and the proposed project are approximately equal in terms of geologic hazards.

Hydrology

The Reduced Project Size alternative removes 15.01 acres of land that is proposed for development within a 25-year flood zone from the project site. Approximately 4.5 acres of the remaining 12.12-acre commercial area would be within a 25-year flood zone in the Reduced Project Size alternative. All 12.12 acres of the proposed commercial area would be within a 100-year flood zone. The Reduced Project Size alternative would reduce potential flooding impacts compared with the proposed project. The Reduced Project Size alternative is superior to the proposed project in terms of hydrological impacts.

Noise

No noise impacts were associated with the 15.01 acres removed from the project site with the Reduced Project Size alternative. The Reduced Project Size alternative and the proposed project would be equal in terms of noise impacts.

Fire Protection Services

The Reduced Project Size alternative would add a smaller area to the service area of the Gilroy Fire Department. The difference in impacts would be minor and neither the Reduced Project Size alternative or the proposed project would have significant impacts. The Reduced Project Size alternative would be slightly superior to the proposed project in terms of impacts on fire protection services.

Police Protection Services

The Reduced Project Size alternative would add a smaller area to the service area of the Gilroy Police Department. Police staffing is based on residential population and there would be no difference in impacts between the Reduced Project Size alternative and the proposed project. The Reduced Project Size alternative would be similar to the proposed project in terms of impacts on police services.

Water Supply

The Reduced Project Size alternative would retain 15.01 acres of proposed commercial land in agricultural use. With the Reduced Project Size alternative water use on the 15.01 acres would be an estimated 42 acre-feet per year. This is approximately 41.5 acre-feet per year more water than would be used with the proposed project. The Reduced Project Size alternative uses significantly more water than the proposed project. The Reduced Project Size alternative is inferior to the proposed project in terms of impacts to water supply.

Wastewater

The Reduced Project Size alternative would reduce wastewater generation by approximately 4,500 gpd compared to the proposed project. This represents an approximate 12 percent reduction in project wastewater generation. Neither project would result in a significant impact on wastewater services. The Reduced Project Size alternative would be slightly superior to the proposed project in terms of impacts on the wastewater system.

Transportation/Circulation

The Reduced Project Size alternative would reduce the number of vehicular trips for the commercial land uses by 55 percent or by 8,265 daily trips, reducing the impact on the affected street network. In addition, the elimination of the commercial parcels south of the sports park entrance would eliminate the significant impact to the Farman Frontage Road/Monterey Street intersection. The Reduced Project Size alternative would be superior to the proposed project in terms of traffic impacts.

Alternative #3 (Alternative Site)

The alternative project site is located along the western side of Monterey Road to the north and south of Day Road in northern-most Gilroy. The location of the Alternative Site is illustrated in Figure 29. About half of the Alternative Site is within the existing Gilroy city limits. The Alternative Site is contiguous with the northern boundary of the existing Gilroy USA for approximately 1,100 feet. The alternative project site and surrounding area are currently used for a variety of rural and commercial uses. The West Branch of Llagas Creek runs in a drainage channel along part of the western boundary of the Alternative Site. Table 11 lists parcels included within the Alternative Site, their current uses and their acreage. Alternative Site and vicinity land uses are shown in Figure 30.

The Alternative Site is designated COMMERCIAL – GENERAL SERVICES and RESIDENTIAL – NEIGHBORHOOD DISTRICT in the *Draft Gilroy 1999-2020 General Plan*. The General Plan shows land use in a conceptual manner in the Alternative Site area, so a breakdown of land use acreage on the Alternative Site, based on the General Plan land use map is not meaningful. For this analysis, it is assumed that Alternative Site land use would be divided evenly between commercial and residential uses, closely matching the proposed project land uses. The approved sports park would be developed outside the USA at its already approved location.

Aesthetics

The Alternative Site alternative would involve commercial and residential development similar to the proposed project. The Alternative Site is partly developed with a mix of commercial and rural residential uses. There are no large open agricultural areas at the Alternative Site, and there is no wooded backdrop as at the project site. In addition, the Alternative Site is not in a location that is as

visually prominent as the project site, which is located at a major entry point to the City from U.S. Highway 101. The Alternative Site alternative would have a less than significant impact to visual character, and slightly less visual impact than the proposed project. The Alternative Site alternative would be slightly superior to the proposed project in terms of aesthetics.

TABLE 11

Alternative Site Parcels

APN	Existing Use(s)	Current Jurisdiction	Acres
783-19-010	Agricultural fields; Residence and agricultural buildings in southeast corner; Drainage channel along south boundary.	Gilroy	24.21
790-06-008	Rural residence	Santa Clara County	.87
790-06-010	Storage yard	Santa Clara County	.50
790-06-011	Vacant land	Santa Clara County	1.00
790-06-024	Residence and outbuildings; Used merchandise sales; Agricultural buildings; Vacant land	Santa Clara County	14.32
790-06-036	Agricultural field/vacant land	Santa Clara County	1.44
790-06-037	Veterinary hospital	Santa Clara County	1.35
790-06-041	Recreational vehicle service and storage; Agricultural fields/vacant land	Santa Clara County	7.00
Total Alternative Site			**50.69**

Source: Santa Clara Valley Assessor's Office and EMC Planning Group Inc.

Agricultural Resources

The Alternative Site contains a mixture of designations on the *Santa Clara County Important Farmlands Map*. Most of the area north of Day Road is designated Unique Farmland, and a small portion is designated Prime Farmland. The area immediately south of Day Road is designated Other Land, including the recreational vehicle facility, a rural residence and vacant land. Most of the remaining land is designated Prime Farmland, with a small area of Unique Farmland. Some of the designated Unique and Prime Farmland on the Alternative Site is developed with urban uses and some of the Other Land is undeveloped. Table 12 presents a summary of approximate areas of designated farmland and actual land use on the Alternate Site.

Figure 29

Alternative Site Location

See Final SEIR for Figure 29

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Figure 30

Alternative Site and Vicinity Land Uses

See Final SEIR for Figure 30

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TABLE 12
Agricultural Land Designations and Uses

APN	Farmland Designation	Actual Uses	Approx. Acres
783-19-010	Unique Farmland	Agricultural fields	14.7
	Unique Farmland	Residence and agricultural buildings; Drainage channel	1.5
	Prime Farmland	Agricultural fields	7.5
	Prime Farmland	Drainage channel	.5
790-06-008	Other Land	Rural residence	.9
790-06-010	Other Land	Storage yard	.5
790-06-011	Prime Farmland	Vacant land	.2
	Unique Farmland	Vacant land	.8
790-06-024	Other Land	Vacant land	3.6
	Prime Farmland	Agricultural fields/ vacant land	7.9
	Unique Farmland	Agricultural buildings Residence and outbuildings; Used merchandise sales	2.8
790-06-036	Prime Farmland	Agricultural field/vacant land	.9
	Unique Farmland	Agricultural field/vacant land	.5
790-06-037	Prime Farmland	Veterinary hospital	1.1
	Unique Farmland	Veterinary hospital	.3
790-06-041	Other Land	Recreational vehicle service and storage;	4.0
	Other Land	Agricultural fields/vacant land	3.0
Total			**50.7**
	Other Land		**12.0**
	Prime Farmland		**18.1**
	Unique Farmland		**20.6**
		Built	**11.6**
		Vacant/ Agricultural	**39.1**

Source: California Department of Conservation and EMC Planning Group Inc.

The Alternative Site alternative would result in the conversion of 38.7 acres of designated Unique or Prime Farmland. This is 16.2 acres less designated farmland than would be converted with the proposed project. However, approximately 3.4 of

these designated acres are covered with existing built features. The Alternative Site alternative would also result in the conversion of 6.6 acres of vacant land that is designated as Other Land, but may contain farmland that would qualify as Unique or Prime. Thus, the Alternative Site alternative is likely to convert approximately 41.9 acres of designated or potential qualified Farmland to non-agricultural uses. This would be eight acres less conversion of actual farmland than the proposed project. None of the Alternative Site parcels is under a Williamson Act contract. The Alternative Site alternative is superior to the proposed project in terms of agricultural considerations.

Air Quality

The Alternative Site alternative would be consistent with the *Draft Gilroy 1999-2000 General Plan* and therefore consistent with the BAAQMD *Clean Air Plan*. The Alternative Site alternative would therefore have a less than significant impact on air quality. The Alternative Site alternative would result in essentially the same number of vehicular trips and similar emissions to the proposed project. The Reduced Project Size alternative would be similar to the proposed project in terms of air quality.

Biological Resources

The Alternative Site alternative would result in the construction of commercial and residential uses on approximately 50 acres of land currently used principally for agricultural, commercial and residential uses. There are at least 20 mature landscape trees on the Alternative Site, most in association with the rural residences at the northwest corner of Day Road and Monterey Road, and to the south of Day Road. It is possible that some of these trees would be considered "significant" trees as described in the *City of Gilroy Consolidated Landscaping Policy*. These trees could also provide habitat, food sources or nesting areas for a number of species of animals and birds

The Alternative Site borders on the West Branch of Llagas Creek for approximately 1,000 feet, but the creek is in a highly altered artificial channel at this point and there is minimal likelihood that important biological resources are located along this channel. Based on their described preferred habitat, several of the special-status species that could potentially occur on the project site could also occur on the Alternative Site. These potential special-status species include the California tiger *salamander (Ambystoma californiense)*, Western spadefoot toad (*Scaphiopus hammondii*), and Burrowing Owl (*Athene cunicularia*). No biological resource reconnaissance trips have been made to the Alternative Site, and it is not known if any of these special-status species actually occurs on the site.

Because the Alternative Site does not border a large natural riparian corridor and because much of the Alternative Site is developed, it has less potential as habitat than does the project site. Biological issues at the Alternative Site would be less than those at the project site. The Alternative Site alternative would be slightly superior in terms of biological resources.

Cultural Resources

The Alternative Site alternative has similar archaeological issues as the proposed project. Although the West Branch of Llagas Creek is now channelized, the area is part of an alluvial area known to contain many buried prehistoric resources. The Alternative Site is shown as an archaeologically sensitive area on the *City of Gilroy Archaeological Sensitivity Map*. No archaeological reconnaissance was conducted for the Alternative Site. According to archaeological reports prepared for the Antonio del Buono Elementary School, located approximately 700 feet south of the Alternative Site, there are several known archaeological sites in the vicinity.

No historic structure evaluation was conducted for the Alternative Site. According to the archaeological report prepared for the Antonio del Buono Elementary School there are no registered historic structures in the vicinity. There is at least one structure in good condition on the Alternative Site that appears to have potential for historic merit. The residence at the northwest corner of Monterey Road and Day Road is an older home, in good condition, and with few apparent alterations. There are several residences and barns to the south of Day Road that appear to be in poor condition, but may be sufficiently old to warrant historic investigation.

Archaeological issues on the Alternative Site are similar to those on the project site. There appears to be less likelihood that potentially historic structures would be affected by the Alternative Site alternative. In terms of potential impacts on cultural resources the Alternative Site alternative is slightly superior to the proposed project.

Geology

There would be no unusual geologic impacts associated with either the Alternative Site alternative or the proposed project. The Alternative Site alternative and the proposed project are approximately equal in terms of geologic hazards.

Hydrology

Flooding characteristics of the Alternative Site changed with the completion of the channelization of the West Branch of Llagas Creek in the vicinity of the Alternative Site in the 1980s. Revised FEMA flood zone maps were issued for the City of Gilroy in 1998. According to these maps, most of the area of the Alternative Site north of Day Road is in flood zone AE, and is subject to one-hundred year floods at a base flood elevation of between 221 and 225 feet above mean sea level. The portion of the

Alternative Site south of Day Road is not included on the map because it is outside the city limits. Adjacent areas that are included on the map, suggest that portions of this area are within the 100-year flood zone and that the remainder of the area is in Zone X, an area protected from 100-year floods because the 100-year flood flow is contained within the channel. The Alternative Site has less severe flooding than the project site. The Alternative Site alternative is superior to the proposed project in terms of hydrology.

Noise

The Alternative Site is located along a section of Monterey Road that has less traffic than the section of Monterey Road near the project site. Because there is less traffic the ambient noise level would be lower at the Alternative Site than at the project site. The Alternative site will not receive the noise that will be associated with the sports park when it is built. The Alternative Site alternative is superior to the proposed project in terms of noise impacts.

Fire Protection Services

Approximately half of the Alternative Site is currently within the City of Gilroy and receives fire protective services from the Gilroy Fire Department. With the Alternative Site alternative, the Gilroy Fire Department would gain responsibility for an additional 25-acre area of residential or commercial development. Furthermore, development of the 25 acres already under their jurisdiction would be intensified. However, under the Alternative Site alternative, the Gilroy Fire Department would not have responsibility for the sports park. Overall fire protective services requirements under the Alternative Site alternative would be the same as with the proposed project, with jurisdictional responsibility split differently under each. The difference in impacts would be minor and neither the Alternative Site alternative or the proposed project would have significant impacts. The Alternative Site alternative would be similar to the proposed project in terms of impacts on fire protection services.

Police Protection Services

Approximately half of the Alternative Site is currently within the City of Gilroy and receives police protective services from the Gilroy Police Department. Police staffing is based on residential population. Since the Alternative Site is currently outside the urban services area, even those areas currently within the city limits would not be developed under existing conditions. Therefore, the Alternative Site alternative would add approximately 25 acres of residential development to the City, or about the same amount of additional residential development as the proposed project. However, under the Alternative Site alternative, the Gilroy Police Department would not have responsibility for the sports park. There would be no difference in overall police services demand between the Alternative Site alternative

and the proposed project, but jurisdictional responsibility would be split differently under each. The Alternative Site alternative and the proposed project would be approximately equal in terms of impacts on police services.

Water Supply

Many of the uses on the Alternative Site (recreational vehicle storage, used merchandise sales, vacant land) use less water than the primarily agricultural uses on the project site. Existing water use on the Alternative Site is less than on the project site. The Alternative Site alternative would have essentially the same uses and would use essentially the same amount of water as the proposed project. The Alternative Site alternative would use similar amounts of water as the proposed project but would result in a smaller reduction in water use than either the proposed project or the "No Project" alternative. The Alternative Site alternative is inferior to the proposed project.

Wastewater

The Alternative Site alternative would include essentially the same amount of residential and commercial development as the proposed project, and wastewater generation would be similar. Neither the Alternative Site alternative or the proposed project would result in a significant impact on wastewater services. The Alternative Site alternative would be similar to the proposed project in terms of impacts on the wastewater system.

Transportation/Circulation

The Alternative Site alternative would generate the same number of daily and peak hour trips as the proposed project. The section of Monterey Road in the vicinity of the Alternative Site has less traffic than the section of Monterey Street near the project site. Access to U.S. Highway 101 from the Alternative Site is south on Monterey Road to Leavesley Road or north on Monterey Road to Masten Road. The Alternative Site is approximately midway between Leavesley Road and Masten Road. The majority of commute traffic in the U.S. Highway 101 corridor near Gilroy is headed to and from the major employment centers of the Silicon Valley. Most commute traffic from the residential areas of the Alternative Site alternative would be traveling to and from San Jose and would use the lightly traveled Masten Road to reach U.S. Highway 101. Traffic generated by the Alternative Site alternative along Monterey Road between the Alternative Site and downtown Gilroy would be mostly for shopping trips and would be take place for the most part outside peak hours. A traffic impact analysis has not been prepared for the Alternative Site alternative. Although traffic generation would be the same, the Alternative Site alternative is likely to have less impact on traffic levels of service than the proposed project because of its position relative to heavily traveled and congested roads. The Alternative Site alternative is slightly superior to the proposed project from a traffic impact standpoint.

Evaluation of Alternatives

CEQA Guidelines section 15126.6 (d) requires the EIR to present enough information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.

CEQA Guidelines section 15126.6(e) requires the selection of an environmentally superior alternative. If the "No Project " alternative is the environmentally superior alternative, then the environmentally superior alternatives amongst the remaining alternatives must be identified. The alternatives are summarized and compared in a matrix format in Table 13 and Table 14.

The "No Project " alternative is the environmentally superior alternative, because it eliminates the unavoidable significant impact of loss of prime farmland and it results in reduced environmental impacts. Although there are no environmental impacts for the "No Project" alternative, it does result in the highest water use because it retains the project site in water-intensive agricultural use. For this reason it is considered worse than the proposed project and other alternatives in terms of impacts to the water supply.

The Reduced Project Size alternative is the next best alternative. It reduces the magnitude of the unavoidable significant impact to agricultural resources, and also reduces impacts on air quality, hydrology and transportation. The Reduced Project Size alternative would not significantly reduce the potential noise impacts at the residential development along Monterey Road and West Luchessa Avenue. If mitigation fails to fully mitigate noise in those areas, the noise impacts would be significant and unavoidable.

The Alternative Site alternative reduces conversion of agricultural land, and especially conversion of Prime Farmland. More of the Alternative Site is already developed than the project site. The Alternative Site alternative may have slightly reduced impacts on biological resources, and would eliminate the possibility of a significant unavoidable impact from noise. The Alternative Site alternative also reduces the hydrological impacts of the proposed project.

It should be noted however, that although the Alternative Site alternative could eliminate a potentially significant impact from noise, that Reduced Project Size alternative is a better overall alternative environmentally and also a superior alternative from a land use planning standpoint because of its greater contiguity to the established urban area. Noise impacts at the project (and Reduced Project Size) site are greater because of the project site's location adjacent to developed portions of the City where higher traffic volumes and noise levels are to be expected as a matter of course. Although the Alternative Site alternative eliminates the noise

impacts that may be unavoidable and significant in the proposed project and the Reduced Size alternative, this is a direct result of the Alternative Site being located more distant from the more densely developed portions of the City. The Alternative Site alternative, though connected to Gilroy by planning boundaries, is more physically separated from the urbanized areas than the Reduced Project Site alternative, and thus a less desirable choice from a land planning perspective.

TABLE 13

Summary of Environmental Effects of Proposed Project and Alternatives

Environmental Issue	Proposed Project	Alternative 1 "No Project"	Alternative 2 "Reduced Project Size"	Alternative 3 "Alternative Site"
Aesthetics	Less Than Significant	No Impact	Less Than Significant	Less Than Significant
Agricultural Resources	Significant Unavoidable	No Impact	Significant Unavoidable	Significant Unavoidable
Air Quality	Mitigated to Less Than Significant	No Impact	Mitigatable to Less Than Significant	Mitigatable to Less Than Significant
Biological Resources	Mitigated to Less Than Significant	No Impact	Mitigatable to Less Than Significant	Mitigatable to Less Than Significant
Cultural Resources	Mitigated to Less Than Significant	No Impact	Mitigatable to Less Than Significant	Mitigatable to Less Than Significant
Geology	Less Than Significant	No Impact	Less Than Significant	Less Than Significant
Hydrology	Potentially Significant Unavoidable	No Impact	Mitigatable to Less Than Significant	Mitigatable to Less Than Significant
Noise	Potentially Significant Unavoidable	No Impact	Potentially Significant Unavoidable	Less Than Significant
Fire Protection Services	Less Than Significant	No Impact	Less Than Significant	Less Than Significant
Police Protection Services	Less Than Significant	No Impact	Less Than Significant	Less Than Significant
Water Supply	Less Than Significant	No Impact	Less Than Significant	Less Than Significant
Wastewater	Less Than Significant	No Impact	Less Than Significant	Less Than Significant
Transportation/ Circulation	Mitigated to Less Than Significant	No Impact	Mitigatable to Less Than Significant	Potentially Significant Mitigatable to Less Than Significant

Source: EMC Planning Group Inc.

TABLE 14

Comparison of Environmental Effects of Alternatives to Proposed Project

Environmental Issue	Alternative 1 "No Project"	Alternative 2 "Reduced Project Size"	Alternative 3 "Alternative Site"
Aesthetics	Better	Slightly Better	Slightly Better
Agricultural Resources	Much Better	Better	Slightly Better
Air Quality	Better	Better	Similar
Biological Resources	Slightly Better	Similar	Slightly Better
Cultural Resources	Better	Slightly Better	Slightly Better
Geology	Better	Similar	Similar
Hydrology	Better	Better	Better
Noise	Better	Similar	Better
Fire Protection Services	Better	Slightly Better	Similar
Police Protection Services	Better	Slightly Better	Similar
Water Supply	Worse	Worse	Worse
Wastewater	Better	Better	Similar
Transportation / Circulation	Much Better	Better	Slightly Better

4.0 Persons Contacted, Literature Cited and Report Preparers

4.1 Persons Contacted

Captain Lanny Brown, Gilroy Police Department.

Ms. Sue DeBorde, Fehr and Peers Associates Inc.

Mr. William Headley, Jr., Facilities and Parks Development Manager, City of Gilroy.

Mr. Roger Maggio, Deputy Fire Marshall, City of Gilroy.

Mr. Don Nunez, Senior Civil Engineer, City of Gilroy Engineering Division

Ms. Kathy Sakahara, Human Resources Department, City of Gilroy.

Mr. Tom Simonson, Planning Coordinator, Greystone Homes Inc.

Mr. Bryan Stice, Planner I, City of Gilroy Planning Division.

Mr. Kirk Wheeler, P.E. Principal, Schaaf and Wheeler.

4.2 Literature Cited

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*LSA Associates, Inc. *Preliminary Assessment of the Biological Resources of the Lands of Blocher-Filice.* January 1993.

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*United States Army Corps of Engineers. *Pajaro River Basin Uvas-Carnadero Creek, California; General Design memorandum Phase I Report.* July 1981.

*United States Department of Agriculture Soil Conservation Service. *Soil Survey of Eastern Santa Clara Area, California.* September 1974. Washington, DC.

Documents marked with an asterisk may be viewed at the City of Gilroy Planning Division office at 7351 Rosanna Street, Gilroy CA. All documents are available for review at EMC Planning Group Inc., 99 Pacific Street, Suite 155F, Monterey, CA. by appointment, (831) 649-1799.

4.3 Report Preparers

EMC Planning Group Inc.

Teri Wissler, Planning Manager
Project Manager

Richard James, Associate Planner
Report Preparation and Graphics

Cara Galloway, Senior Planner/Biologist
Biological Assessment

Valerie Stack, Administrative Assistant
Document Production

Archaeological Resource Management

Dr. Robert Cartier, Principal Investigator
Preliminary Archaeological Reconnaissance

Edward L. Pack Associates, Inc.

Fehr and Peers Associates, Inc.

Appendix A

Notice of Preparation and and Responses to Notice of Preparation

Notice of Preparation

To: Responsible and Trustee Agencies

From: City of Gilroy Community Development Department
Planning Division

Subject: Notice of Preparation of a Draft Subsequent Environmental Impact Report
Gilroy Sports Park and Urban Service Area Amendment Request

SCH Number 98102079

Location: The 133.2-acre project site is located immediately south of the City of Gilroy in unincorporated Santa Clara County, approximately 35 miles south of San Jose, 10 miles south of Morgan Hill, and 30 miles northeast of Salinas. Figure 1 illustrates the regional location. Figure 2 illustrates the project vicinity.

An environmental impact report (EIR) was prepared for the proposed project and certified by the City of Gilroy on June 7, 1999, and the Gilroy Sports Park Master Plan was subsequently approved by the City. The certified EIR was prepared using the existing general plan land use designations for the project site, which includes some areas not currently proposed for development. The City of Gilroy is in the process of adopting an updated general plan. The draft of the general plan includes changes in the land use designation for some of the parcels included in the proposed project. These parcels were evaluated in the certified EIR with an OPEN SPACE designation but are designated RESIDENTIAL NEIGHBORHOOD DISTRICT and COMMERCIAL – GENERAL SERVICES in the new general plan. The City of Gilroy applied to the Santa Clara County Local Agency Formation Commission (LAFCo) for the addition of the project site to the City's Urban Service Area. Because of the probable upcoming changes to the general plan land use designations for the project site, LAFCo required further environmental analysis based on the expected new designations. This subsequent EIR is being prepared because this expected change in the general plan land use designations is a significant change in the project description and may result in new or more severe significant environmental impacts that were not identified in the certified EIR.

The project site is located at the south end of Gilroy at the southwest corner of Monterey Road and West Luchessa Avenue. It is bordered by West Luchessa Avenue to the north, Uvas Creek and Farman Lane to the south, Monterey Road and Monterey Frontage Road to the east, and Uvas Creek to the west. Surrounding land uses are residential (single-family), commercial (hotels), and agricultural (row crops). U.S. Highway 101 is located approximately 300 feet from the south end of the site, to approximately 1,100 from the north end of the site. The City of Gilroy

will be the Lead Agency and will prepare the Subsequent Environmental Impact Report for the project identified in this notice of preparation. In connection with the proposed project, we need to know the views of your agency as to the scope and content of the environmental information that is germane to your agency's statutory responsibility.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice. Please respond by January 10, 2000.

Please send your response to:

Bryan Stice
City of Gilroy Planning Division
7351 Rosanna Street
Gilroy, CA 95020

(408) 846-0440

In your response please provide the name of a contact person in your agency.

Date: _____ Signature: _____
Title: Planner I

Project Description

Existing Conditions

The entire 133.2-acre project site is located in unincorporated Santa Clara County, immediately south of both the city limits of Gilroy and the Urban Service Area limits. The site is currently in agricultural row-crop production. Four rural residences are located along the site's eastern boundary on Monterey Frontage Road. A propane gas sales facility is located at the corner of Monterey Road and West Luchessa Avenue. Uvas Creek is located at the western boundary and a portion of the southern boundary. A flood-control levee was constructed on a portion of the site. The levee extends from ten feet landward of the levee toe, to the bank of the channel. It extends approximately 1,100 feet (on-site) south of West Luchessa Avenue to 4,500 feet upstream (and off-site) to Miller Avenue.

The City of Gilroy draft 1999 general plan land use designations for the project site are PARK/RECREATION FACILITY, RESIDENTIAL – NEIGHBORHOOD DISTRICT and COMMERCIAL – GENERAL SERVICES. Draft 1999 General plan land use designations surrounding the site include RESIDENTIAL – LOW DENSITY (north), RESIDENTIAL – NEIGHBORHOOD DISTRICT (west and south), COMMERCIAL – GENERAL SERVICES (east and north), COMMERCIAL – VISITOR SERVING (east) and OPEN SPACE (south).

Proposed Conditions

The proposed project consists of an Urban Service Area Amendment request to Santa Clara County LAFCo for land designated for open space, residential and commercial uses. The development of the Gilroy Sports Park and construction of off-site improvements including extension of the Uvas Creek Trail north to West Luchessa Avenue, and south to Gavilan College (including a pedestrian/bicycle bridge), extension of the city's recycled water distribution line to the sports park, and roadway improvements were approved by the City of Gilroy when they adopted the Gilroy Sports Park Master Plan. The sports park and related improvements will be constructed over an approximate 20-year time frame. This Subsequent EIR analyzes the entire USA amendment request and potential impacts of the development of the sports park together with the adjacent USA amendment areas.

Urban Service Area Amendment Request

The entire 133.2-acre site is proposed for inclusion into the city' s Urban Service Area. This would include the 78.4-acre sports park site, a 7.00-acre parcel containing a flood control levee on which a bicycle trail will be built, 27.72 acres designated in the draft general plan as RESIDENTIAL – NEIGHBORHOOD DISTRICT and 27.13 acres

designated in the draft general plan as COMMERCIAL – GENERAL SERVICES. The project site adjoins the existing urban service area on the north and east sides and on the northern-most end of the west side. Figure 3 identifies the project site, draft general plan land use designations and the project site's relation to the existing Urban Service Area. Table 1 identifies affected parcels.

TABLE 1

Assessor's Parcels in Urban Service Area Amendment Request

Draft 1999 General Plan Land Use Designations	Assessor's Parcel Number	Acres
Park/ Public Recreation	808-21-030	26.27
Park/ Public Recreation	808-21-028	31.53
Park/ Public Recreation	808-21-026	20.56
Park/ Public Recreation	808-21-021	7.00
Residential – Neighborhood District	808-21-018	0.87
Residential – Neighborhood District	808-21-016	26.05
Residential – Neighborhood District	808-21-008	0.10
Residential – Neighborhood District	808-21-009	0.70
Commercial – General Services	808-21-031	7.42
Commercial – General Services	808-21-029	4.70
Commercial – General Services	808-21-027	6.20
Commercial – General Services	808-21-013	4.51
Commercial – General Services	808-21-014	1.35
Commercial – General Services	808-21-015	2.95
Total		133.21

Source: City of Gilroy

Gilroy Sports Park

The *Gilroy Sports Complex Final Master Plan*, prepared by Beals Group, Inc. in March 1999, is available for public review at the City of Gilroy Community Services Department. The master plan has been approved by the City. This Subsequent EIR will analyze the approved sports park's contributions to overall project impacts. Sports park components will include the following: recreational play fields (eight softball diamonds and four soccer fields and concession/restrooms); premier play fields (one 90-foot baseball diamond, two little leagues diamonds and one soccer field and concession/restrooms); competition play fields (one softball/baseball

diamond and one soccer field and concession/restrooms); 8.8 acres of park preserve with volleyball, family picnic, concessions/restrooms, bocce ball courts, and play area; commercial recreation (indoor soccer, roller hockey, community building, storage); corporation yard; parking (1,043 spaces); and a night watch park ranger station. Soccer fields overlay baseball/softball fields. Football may also be played on the soccer fields.

The master plan also includes the following: a minimum 50-foot habitat buffer zone, measured from 50 feet from top of bank, along Uvas Creek to be enhanced with native plantings; a six-foot perimeter fence; walking/bicycle paths throughout the site including a portion of the extension of the Uvas Creek Trail; entry gates and an entry building at the Monterey Frontage entrance.

Off-Site Improvements

Off-site improvements included in the master plan include the extension of the Uvas Creek Trail north to West Luchessa Avenue, and south to Gavilan College; extension of the city's recycled water distribution line to the sports park; and roadway improvements.

Uvas Creek Trail Extension. The project's trail system will connect to the existing Uvas levee trail, which ends just past West Luchessa Avenue, and to a southward extension to the Gavilan College area. A bridge crossing is planned at the central, southern portion of the project site. The trail then continues south to Mesa Road and east into the Gavilan College campus.

Recycled Water Distribution Line. The city will extend a recycled water distribution line to serve the landscape needs of the sports park.

Roadway Improvements. To enable pedestrian traffic, a six-foot wide sidewalk will be constructed southward from the West Luchessa Avenue/Monterey Road intersection to the Monterey Frontage Road. There will also be a crosswalk at the Monterey Frontage Road, with appropriate project signs and introduction to the sports park. The crosswalk and intersection of Monterey Road and Monterey Frontage Road will be signalized. The sidewalk will continue down the Monterey Frontage Road and into the park itself. The sidewalk will be buffered from the road with a parkway strip consisting of shade trees and accent planting.

Phasing

The sports park will be developed in approximately nine phases over an approximate 20-year time frame. Construction will begin near the entrance and continue to the west end of the site for Phases One through Seven. Phases Eight through Nine can occur at any time, and have been separated based on that area being able to be constructed independently of the other phases.

Residential Development

The proposed project includes 27.72 acres designated in the *Draft 1999 Gilroy General Plan* as RESIDENTIAL – NEIGHBORHOOD DISTRICT. A proposal for subdivision of this area has been submitted to the City of Gilroy and is now in the City's Residential Development Ordinance process. A tentative map application can be submitted following approval in the Residential Development Ordinance process.

The proposed subdivision will have 147 units of housing and will encompass the entire 27.72-acre residential area. The proposed project will consist of 43 standard (6,000 square-foot or greater lot) single family dwellings, 47 small (less than 6,000 square-foot lot) single family dwellings and 57 units in triplexes on a common lot. A private park area of approximately one acre will be included for use of project residents. Access to the proposed project will be provided off West Luchessa Avenue. Streets within the proposed project will be public.

Commercial Development

The proposed project includes 27.13 acres designated in the *Draft 1999 Gilroy General Plan* as COMMERCIAL – GENERAL SERVICES. No development is currently proposed in the commercial areas. The EIR will evaluate environmental effects of the development of these areas based on a probable maximum build-out scenario. A development scenario for inclusion in the EIR assumes that the commercial areas will have 25 percent lot coverage and average two stories in height. This scenario is consistent with analysis in the EIR for the new general plan and will result in a total of 590,238 square feet of commercial development on the project site.

Scope of the Subsequent EIR

The Subsequent EIR will analyze the potentially adverse environmental effects of the proposed subdivision and the maximum probable commercial build-out of the project site as allowed under the proposed general plan. No changes are proposed for the development of the approved sports park or related off-site improvements, and these will be analyzed only as they contribute to overall project impacts and cumulative impacts. Sports park-specific environmental impacts were adequately addressed in the certified EIR and no new analysis will be presented. New analysis in the Subsequent EIR will focus on the maximum probable build-out of the residential and commercial parcels and their cumulative effects with the sports park.

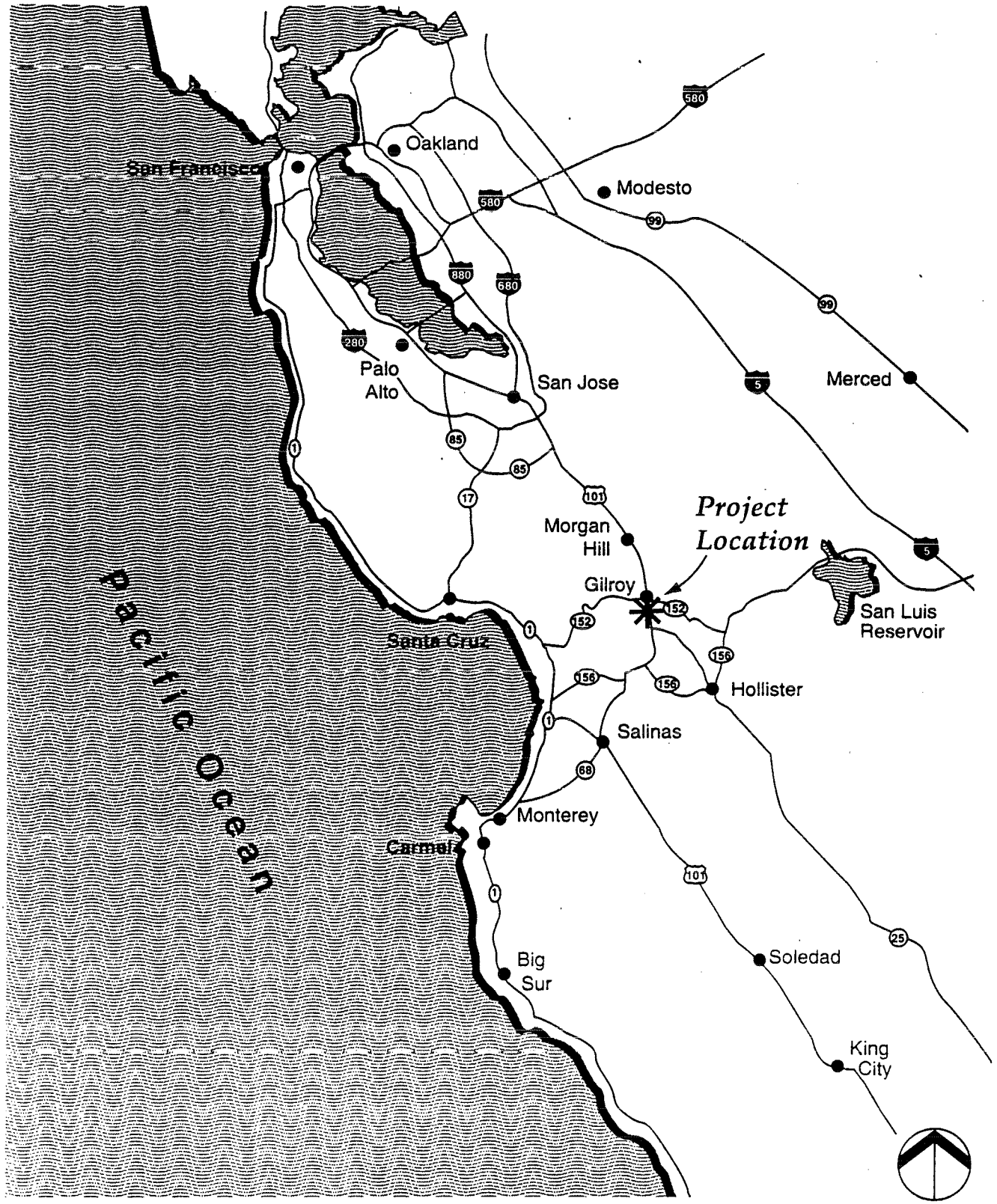
The Subsequent EIR will analyze the proposed project's potential adverse environmental effects on hydrology, public services and service systems, transportation/circulation, air quality, noise, cultural resources, and aesthetics. Revised cultural resources, noise and traffic studies will be prepared for the proposed project.

The revised traffic report will address AM and PM weekday and Saturday peak hour traffic. Additional traffic analysis will be conducted for the following intersections:

- West Luchessa Avenue and Princevalle Street;
- West Luchessa Avenue and Church Street;
- Monterey Road and Monterey Frontage Road;
- Monterey Road and Luchessa Avenue;
- U.S. 101 and Monterey Road northbound off-ramps;
- U.S. 101 and Monterey Road southbound on-ramps.

Additional traffic analysis will be conducted for the following road and freeway segments:

- Monterey Road, Tenth Street to West Luchessa Avenue;
- Monterey Road, West Luchessa Avenue to U.S. 101 southbound on-ramps;
- West Luchessa Avenue, Tenth Street to Princevalle Street;
- West Luchessa Avenue, Princevalle Street to Santa Teresa Boulevard;
- U.S. 101, Tenth Street to Monterey Road;
- U.S. 101, Monterey Road to Castro Valley Road.



Source: California State Automobile Association and EMC Planning Group Inc.

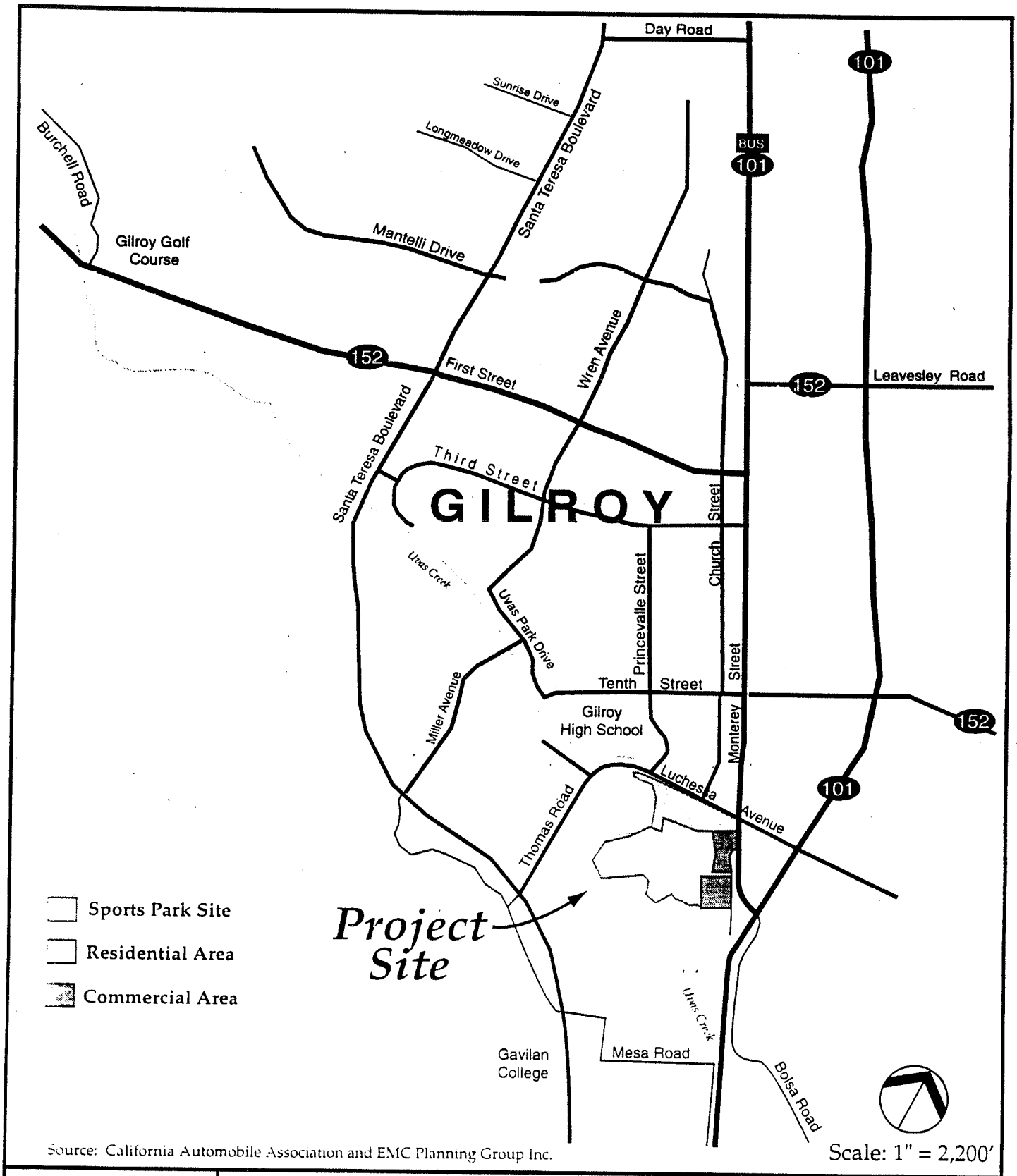
Not to Scale

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy Sports Park and USA Amendment
Subsequent EIR NOP

Regional Location

Figure
1



Source: California Automobile Association and EMC Planning Group Inc.

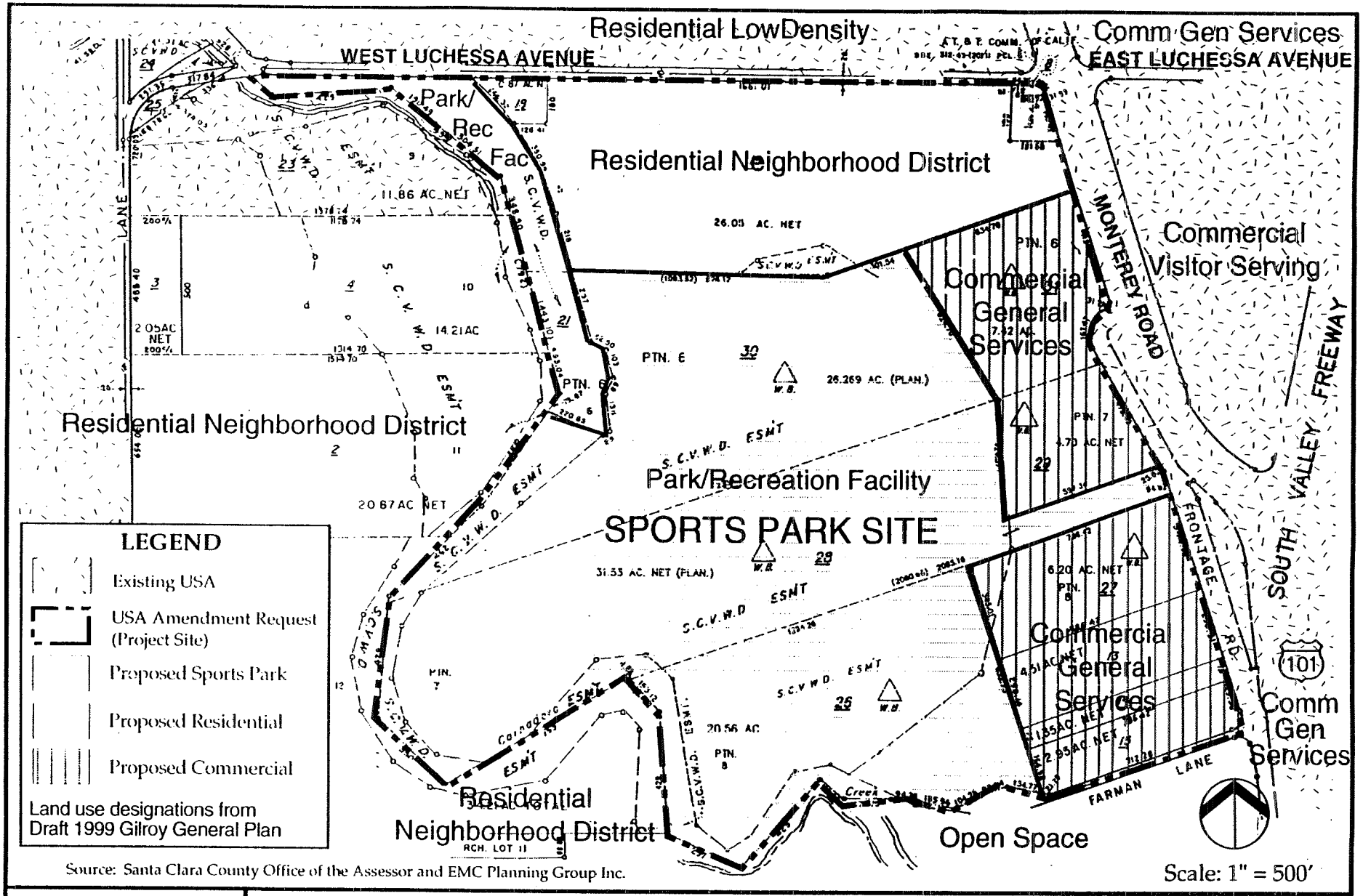
Scale: 1" = 2,200'

EMC Planning Group Inc.
A Land Use Planning and Design Firm

Gilroy Sports Park and USA Amendment
Subsequent EIR NOP

Project Vicinity

Figure 2



Source: Santa Clara County Office of the Assessor and EMC Planning Group Inc.

Scale: 1" = 500'

EMC Planning Group Inc.

A Land Use Planning and Design Firm

Gilroy Sports Park and USA Amendment
Subsequent EIR NOP

Urban Service Area Request

Figure 3

STATE OF CALIFORNIA - BUSINESS, TRANSPORTATION AND HOUSING AGENCY GRAY DAVIS, Governor

DEPARTMENT OF TRANSPORTATION
P O BOX 23660
OAKLAND, CA 94623-0660
Tel: (510) 286-4444
Fax: (510) 286-5513
TDD (510) 286-4454

January 19, 2000

SCL-101-5.26
98102079
SCL101599

Mr. Bryan Stice
City of Gilroy, Planning Division
7351 Rosanna Street
Gilroy, CA 95020

Dear Mr. Stice:

Notice of Preparation (NOP) for the Gilroy Sports Park Draft Environmental Impact Report (DEIR); City of Gilroy

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Gilroy Sports Park project. We have examined the above-referenced document and have the following comments to offer.

We are concerned about the potential impacts this project would have on State transportation facilities, namely US 101 and State Route 152. So that we may analyze these impacts, please ensure the following information is provided in the DEIR:

a. Information on the project's traffic impacts in terms of trip generation, distribution, and assignment. The assumptions and methodologies used in compiling this information should be addressed.

b. Average Daily Traffic (ADT) and AM and PM peak hour volumes on all significantly affected streets and highways, including crossroads and controlling intersections.

c. Schematic illustration of the traffic conditions for: 1) existing, 2) existing plus project, and 3) cumulative for the intersections in the project area.

d. Calculation of cumulative traffic volumes should consider all traffic-generating developments, both existing and future, that would affect the facilities being evaluated.

e. Mitigation measures that consider highway and non-highway improvements and services. Special attention should be given to the development of alternative solutions to circulation problems which do not rely on increased highway construction.

f. All mitigation measures proposed should be fully discussed, including financing, scheduling, implementation responsibilities, and lead agency monitoring.

We look forward to reviewing the environmental document for this project. We do expect to receive a copy from the State Clearinghouse, but in order to expedite our review, you may send two copies in advance to:

Office of Transportation Planning B
IGR/CEQA Branch
Caltrans, District 4
P. O. Box 23660
Oakland, CA 94623-0660

Should you require further information or have any questions regarding this letter, please call Haiyan Zhang of my staff at (510) 622-1641.

Sincerely,

HARRY Y. YAHATA
District Director

By Jean C. R. Finney

JEAN C. R. FINNEY
District Branch Chief
IGR/CEQA

c: State Clearinghouse

SANTA CLARA
Valley Transportation Authority

RECEIVED
JAN 13 2000
Gilroy Planning Div.

January 12, 2000

City of Gilroy
Department of Community Development
7351 Rosanna Street
Gilroy, CA 95020-6141

Attention: Bryan Stice

Subject: Gilroy Sports Park Notice of Preparation of a Draft Subsequent EIR

Dear Mr. Stice:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the Notice of Preparation (NOP) of a Draft Subsequent Environmental Impact Report (DSEIR) for the development of the Gilroy Sports Park, a 133.2-acre sports park accommodating a variety of activities, at the southwest corner of Thomas Road and Highway 101. We have the following comments.

On November 20, 1998, VTA staff commented on the first NOP for this project. Then on April 2, 1999, we commented on the first Draft EIR for this project. Our November and April comments are still relevant and are restated below with comments from the current review of the new NOP.

Existing Transit Service

VTA currently maintains a bus stop on Thomas Road to the south and west of Princevalle Road, within walking distance of the proposed project. The stop is served by *Line 68* which travels between San Jose Diridon Station and Gavilan College.

Pedestrian Access Improvements

VTA staff recommend that the DSEIR consider the following mitigation measures that encourage pedestrian activity and transit use:

- Continuous sidewalks along Thomas Road
- Direct pedestrian pathways to link the various activity centers with the sidewalk on Thomas Road.

These measures will allow patrons of the project to safely and conveniently access existing and future transit services in the area.

Local Street Network and Streetscape

VTA staff also request that the DSEIR consider the urban design features mentioned below in its analysis of the transportation system.

VTA staff are interested in ensuring that the local street network and streetscape in new neighborhoods facilitate travel by all modes. VTA staff suggest that, when development is proposed, the City ensure that urban design for the project feature the following:

- Narrow local streets with sidewalks which directly connect the neighborhood, commercial center, and sports park. This allows residents to access the park and commercial areas by car, foot or bike without burdening the regional transportation network.
- A local street network that could accommodate efficient delivery of transit service.
- Building design in which parking garages and lots are not the prominent feature facing the streets.
- A network of walking and biking paths that connect the sports park, the neighborhood, and commercial services.
- Buildings that front the streets with small setbacks. This creates a pedestrian-friendly environment.

We appreciate the opportunity to review this project and request that future plans and additional information about this project be forwarded to VTA for review and comment. As noted in VTA's November 20, 1998 letter, VTA staff are still considering the possibility of bring bus service to the sports park. VTA staff would like to work with City and project staffs on this possibility.

If you have any questions, please call Lauren Bobadilla of my staff at (408) 321-5776.

Sincerely,

Derek A. Kantar
Environmental Program Manager

DAK:LGB:kh

cc: Roy Molseed, VTA Senior Environmental Analyst

County of Santa Clara
Roads and Airports Department
Land Development Services

101 Skyport Drive
San Jose, California 95110-1302

RECEIVED
JAN 18 2000
Gilroy Planning Div.

January 13, 2000

Mr. Bryan Stice
Planning Division
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

Subject : Notice of Preparation of a Draft Environment Impact Report
Gilroy Sports Park

Dear Mr. Stice,

We have reviewed the Notice of Preparation of a Draft Environmental Impact Report for the subject project and have the following comments :

The traffic impact report should include Santa Teresa Blvd. and Mesa Rd. among any other County-maintained roads. The report should also address the cumulative traffic impacts resulted from this project combined with other proposed developments in this area and mitigation measures.

Thank you for the opportunity to review and comment on this project. If you have any questions, please call me at (408) 573-2463.

Sincerely,

Sean Quach
Project Engineer

Cc : MA/SMS
JME
DEC
AKC
RVE
Files

Gilroy sports park

Board of Supervisors: Donald F. Gage, Blanca Alvarado, Pete McHugh, James T. Beall, Jr., S. Joseph Simitian
County Executive: Richard Wittenberg

Santa Clara Valley Water District

5750 ALMADEN EXPWY
SAN JOSE, CA 95118-3686
TELEPHONE (408) 265-2600
FACSIMILE (408) 266-0271
www.scvwd.dst.ca.us
AN EQUAL OPPORTUNITY EMPLOYER

RECEIVED
JAN 13 2000
Gilroy Planning Div.

January 11, 2000

Mr. Bryan Stice
City of Gilroy Planning Division
7351 Rosanna Street
Gilroy, CA 95020

Dear Mr. Stice:

Subject: Gilroy Sports Park and Urban Service Area Amendment Request

The Santa Clara Valley Water District (District) has reviewed the Notice of Preparation of a Draft Subsequent Environmental Impact Report (DSEIR) for the subject project, received on December 21, 1999. The DSEIR is being prepared due to the probable upcoming changes in land use designations on the easterly and northerly portions of the site from open space to residential neighborhood district and commercial-general services.

The following issues should be addressed and discussed in the DSEIR:

1. Federal Emergency Management Agency maps show that the easterly portion of the proposed residential neighborhood district and the majority of the proposed commercial district is within Zone AH and would be subject to flooding to elevation 192 feet, based on Federal Insurance Administration datum, in the event of a 1 percent flood. To comply with federal flood insurance regulations, the lowest floor and highest adjacent grade of any building must be constructed above the 1 percent water surface elevation. Issues relative to the proposed land use change and resulting increases in runoff and its impacts to the 1 percent flood flow, as well as more frequent flood flows, should be addressed and mitigation measures discussed in the DSEIR. The cumulative effect of increased development and its impact to downstream flooding of Uvas Camadcro Creek should also be addressed. A hydrology study should be performed to determine the effects of filling in the floodplain and to identify any impacts to the existing flooding condition in and adjacent to the project area. Mitigation measures should be discussed and provided for in the event that the study finds that the proposed developments will increase flooding on adjacent properties or increase the areas flooded.

2. The design of the site should incorporate postconstruction water quality mitigation measures such as those found in "Start at the Source Design Guidance Manual for Stormwater Quality Protection," prepared for the Bay Area Stormwater Management Agencies Association. This manual can be obtained from the urban runoff coordinator for the City of Gilroy. Additional information may be found in the Santa Clara Valley Urban Runoff Pollution Prevention Program's "Parking Lot Best Management Practices Manual."

recycled paper

3. As construction on the site will include disturbance of more than 5 acres, a Notice of Intent must be filed with the State Water Resources Control Board in compliance with the National Pollutant Discharge Elimination System Permit for storm water discharge. The DSEIR should include a discussion of the requirement and the Storm Water Pollution Prevention Plan that must be prepared for the site, along with measures that will be included with the project to reduce the introduction of pollutants into storm water runoff.

4. District Ordinance 83-2, Section 6.1, prohibits the pollution of water supplies of the District. To prevent pollutants, including sediments, from reaching that portion of Uvas Carnadero Creek, which is within District jurisdiction, follow the Santa Clara Valley Urban Runoff Pollution Prevention Program's recommended Best Management Practices (BMP) for construction activities, as contained in "Blueprint for a Clean Bay" and the "California Storm Water Construction BMP Handbook." This should be addressed in the water quality section of the DSEIR.

5. District records show 12 wells on the site. In accordance with District Ordinance 90-1, the owner should show any existing well(s) on the plans. The well(s) should be properly registered with the District and either be maintained or abandoned in accordance with the District standards. Property owners or their representative should call Mr. David Zozaya at (408) 265-2607, extension 2650, for more information regarding well permits and the registration or abandonment of any wells.

We appreciate the opportunity to provide comments and wish to review the DSEIR when it has been prepared.

Sincerely,

Sue A Tippets

Sue A. Tippets, P.E.
Engineering Unit Manager
Community Projects Review Unit

State of California - The Resources Agency
GRAY DAVIS, Governor
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

January 7, 2000

RECEIVED
JAN 10 2000
Gilroy Planning Div.

Mr. Bruce Stice
City of Gilroy
Community Development Department
Planning Division
7351 Rosanna Street
Gilroy, California 95020

Dear Mr. Stice:

Gilroy Sports Park
Notice of Preparation (NOP) of a
Draft Subsequent Environmental Impact Report (EIR)
SCH Number 98102079
Santa Clara County

Department of Fish and Game personnel have reviewed the NOP of a Draft Subsequent EIR for the Gilroy Sports Park project. The project would allow construction of a 78.4-acre sports park, a 7-acre flood control levee with a bicycle trail, a 27.7-acre residential development, and a 27.1-acre commercial development on a 133-acre site adjacent to Uvas Creek. We believe that the following issues need to be addressed in the Draft EIR.

Plant and wildlife species that are present or dependant upon potentially impacted habitats need to be identified in the Draft EIR. Particular attention needs to be paid to State- and Federally-listed and candidate species, and unlisted species whose status is of regional concern. The California Natural Diversity Data Base and the California Native Plant Society should be consulted to identify sensitive species that have been documented in the area. Consultation with the data base should not preclude or substitute for qualitative and/or quantitative field surveys.

Sensitive species that are likely to occur in this vicinity include the steelhead (*Oncorhynchus mykiss*), Western pond turtle (*Clemmys marmorata*), California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana aurora draytonii*), burrowing owl (*Athene cunicularia*), several diurnal raptors, and several sensitive bat species. Impacts to any rare, threatened, endangered species, or California species of special concern must be addressed and appropriate surveys conducted by a qualified biologist. Details regarding specific survey protocol can be obtained from this Department. Impacts to these species and their habitats should be avoided. Impacts which are unavoidable must be

identified and appropriate mitigation provided. Because several of the sensitive species in the area are Federally listed, the U. S. Fish and Wildlife Service should also be consulted regarding appropriate survey, avoidance, and mitigation measures.

It is the policy of this Department that a project should cause no net loss of either wetland acreage or wetland habitat value. We recommend impacts to creeks be avoided where possible. Impacts would include, but are not limited to, road crossings, culverts, channelization and rip rap. If improvements to creeks must be made due to increased run-off and potential flooding or to catch sediments, retention basins would be preferable to channelization of the entire stream. In areas which must be channelized, we recommend the channel be oversized in order to allow for vegetation along both banks. For impacts to riparian habitat that cannot be avoided, we recommend a minimum mitigation ratio of 3:1, based on creation of in-kind acreage of equal or better habitat value. Replacement of habitat acreage at a lower ratio may be appropriate if the replacement is completed prior to the destruction of the original habitat. Any revegetation plans should use native species, with seeds or cutting collected on-site.

It is indicated in the NOP that the master plan for the sports complex includes a minimum 50-foot habitat buffer along Uvas Creek. This Department recommends a minimum 100-foot buffer, measured outward from the top of each creekbank, be established to protect the creek and its vegetation, and to provide a travel corridor for wildlife. The 50-foot buffer that has been proposed is not adequate to protect this sensitive habitat type and the species that depend upon it. No roads, buildings, yards, turf, or paved trails should be permitted within the buffer. Pedestrian trails should be located along the outside edge of the riparian vegetation.

The Department has direct jurisdiction under Fish and Game Code sections 1601-03 in regard to any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any stream. We recommend early consultation since modification of the proposed project may be required to avoid impacts to fish and wildlife resources. To avoid unnecessary delays, formal notification under Fish and Game Code sections 1601-03 should be made after all other permits and certifications have been obtained. Work cannot be initiated until a streambed alteration agreement is executed.

A recent court order requires the Department, prior to entering into a 1600 agreement, to conduct an environmental review pursuant to the California Environmental Quality Act (CEQA).

Therefore, because of the additional process required under CEQA which includes minimum document circulation periods, we are no longer restricted to issuing agreements within 30 days. We will still attempt to issue these as soon as possible but, at this time, we are not certain how long it will take to process applications.

The U. S. Army Corps of Engineers (Corps) also has jurisdiction over the discharge of fill to streams and wetlands under Section 404 of the Clean Water Act. We recommend that the Corps be contacted to determine if they have jurisdiction and if they require a permit.

The Draft EIR should discuss the amounts and effects of urban runoff and how these can be mitigated. A policy should be included to require installation and maintenance of oil/grease separators in storm drains. Annual maintenance of the separators, as well as a sweeping program for parking lots should be required.

Impacts to all sensitive species and their habitats should be avoided. Specific measures to adequately mitigate unavoidable impacts, including cumulative ones, need to be incorporated into project design prior to certification of the Draft EIR. A monitoring program, as required by Assembly Bill 3180, must ensure that mitigation measures are effective and must provide for corrective action if they are not effective.

Thank you for the opportunity to comment on this project. We request that subsequent documents related to the project be submitted to this Department for our review. If you have any questions regarding our comments, please contact Martha Schauss, Associate Wildlife Biologist, at (831) 623-4989; or Carl Wilcox, Environmental Program Manager, at (707) 944-5525.

Sincerely,

Brian Hunter
Regional Manager
Central Coast Region

cc: U. S. Fish and Wildlife Service
Sacramento Office

Appendix B

Urbemis 7G Printouts

URBEMIS 7G: Version 3.2

File Name: ENV261r.URB
Project Name: Gilroy USA 98-03
Project Location: San Francisco Bay Area

DETAILED REPORT - Summer

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2005 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC7G (10/96)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Tr ips
Single family housing	10.40 trips / dwelling unit	90.00	936 .00
Condo/townhouse genera	7.10 trips / dwelling unit	57.00	404 .70

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	D iesel
Light Duty Autos	75.00	1.16	98.58	0.26
Light Duty Trucks	10.00	0.13	99.54	0.33
Medium Duty Trucks	3.00	1.44	98.56	
Lite-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Med.-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Heavy-Heavy Trucks	5.00			1 00.00
Urban Buses	2.00			1 00.00
Motorcycles	3.00	100.00 % all fuels		

Travel Conditions

	Residential				Commerci al
	Home-Work	Home-Shop	Home-Other	Commute	Non-Wor k Customer

Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0
5.0					
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0
10.0					
Trip Speeds (mph)	30	30	30	30	30
30					
% of Trips - Residential	27.3	21.2	51.5		

UNMITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Single family housing	11.80	19.87	90.54	7.74
Condo/townhouse general	5.43	8.59	39.15	3.35

	ROG	NOx	CO	PM10
TOTAL EMISSIONS (lbs/day)	17.23	28.46	129.69	11.09

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

MITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Single family housing	11.56	19.40	88.39	7.56
Condo/townhouse general	5.33	8.39	38.22	3.27

	ROG	NOx	CO	PM10
TOTAL EMISSIONS (lbs/day)	16.88	27.78	126.61	10.82

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

Pedestrian Environment

0 Side Walks/Paths: No Sidewalks
0 Street Trees Provide Shade: No Coverage
0 Pedestrian Circulation Access: No Destinations
0 Visually Interesting Uses: No Interest

```
0               Street System Enhances Safety: No Streets Designed this
Way
0               Pedestrian Safety from Crime: No Degree of Perceived Saf
ety
0               Visually Interesting Walking Routes: No Visual Interest

 3.8   <- Pedestrian Environmental Credit
 3.8  /19 = 0.20    <- Pedestrian Effectiveness Factor

Transit Service

0               Transit Service: Dial-A-Ride or No Transit Service

 0.0  <- Transit Effectiveness
 3.8  <- Pedestrian Factor
 3.8  <-Total
 3.8  /110 =    0.03   <-Transit Effectiveness Factor

Bicycle Environment

0               Interconnected Bikeways: No Bikeway Coverage
0               Bike Routes Provide Paved Shoulders: No Routes Provide t
hese Features
0               Safe Vehicle Speed Limits: No Routes
0               Safe School Routes: No Schools
0               Uses w/in Cycling Distance: No Uses
0               Bike Parking Ordinance: No Ordinance or Unenforceable

 4.0  <- Bike Environmental Credit
 4.0 /20 =      0.20  <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if
 the selected land uses do not constitute a mixed use.)

Transit Infrastructure Measures

% Trips Reduced             Measure
15              Credit for Existing or Planned Community Transit Service
0.5             Provide Street Lighting
 15.5            <- Totals

Pedestrian Enhancing Infrastructure Measures (Residential)

% Trips Reduced             Measure
2               Credit for Surrounding Pedestrian Environment
1               Provide Sidewalks and/or Pedestrian Paths
1               Provide Direct Pedestrian Connections
0.5             Provide Street Lighting
 4.5            <- Totals
```

Pedestrian Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
2	Credit for Surrounding Pedestrian Environment
2	<- Totals

Bicycle Enhancing Infratructure Measures (Residential)

% Trips Reduced	Measure
7	Credit for Surrounding Bicycle Environment
2	Provide Bike Lanes/Paths Connecting to Bikeway System
9	<- Totals

Bike Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
5	Credit for Surrounding Area Bike Environment
5	<- Totals

Operational Measures (Applying to Commute Trips)

% Trips Reduced	Measure
0	<- Totals

Operational Measures (Applying to Employee Non-Commute Trips)

% Trips Reduced	Measure
0	<- Totals

Operational Measures (Applying to Customer Trips)

% Trips Reduced	Measure
0	<- Totals

Measures Reducing VMT (Non-Residential)

VMT Reduced	Measure
0	<- Totals

Measures Reducing VMT (Residential)

VMT Reduced	Measure
0	<- Totals

Total Percentage Trip Reduction
with Environmental Factors and Mitigation Measures

Travel Mode	Home-Work Trips	Home-Shop Trips	Home-Other Trips
Pedestrian	0.10	0.40	0.40
Transit	0.54	0.12	0.14
Bicycle	1.80	1.80	1.80

Totals	2.43	2.31	2.34
Travel Mode	Work Trips	Employee Trips	Customer Trips
Pedestrian	0.04	0.40	0.40
Transit	0.54	0.01	0.54
Bicycle	1.00	1.00	1.00
Other	0.00	0.00	0.00
Totals	1.58	1.41	1.94

Changes Made to the Default Values

Operational/Vehicle Related:

URBEMIS 7G: Version 3.2

File Name: ENV261r.URB
Project Name: Gilroy USA 98-03
Project Location: San Francisco Bay Area

DETAILED REPORT - Winter

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2005 Temperature (F): 40 Season: Winter

EMFAC Version: EMFAC7G (10/96)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	10.40 trips / dwelling unit	90.00	936.00
Condo/townhouse genera	7.10 trips / dwelling unit	57.00	404.70

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Duty Autos	75.00	1.16	98.58	0.26
Light Duty Trucks	10.00	0.13	99.54	0.33
Medium Duty Trucks	3.00	1.44	98.56	
Lite-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Med.-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Heavy-Heavy Trucks	5.00			100.00
Urban Buses	2.00			100.00
Motorcycles	3.00	100.00 % all fuels		

Travel Conditions

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work

k Customer					
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0
5.0					
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0
10.0					
Trip Speeds (mph)	30	30	30	30	30
30					
% of Trips - Residential	27.3	21.2	51.5		

UNMITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Single family housing	17.10	22.49	156.96	7.74
Condo/townhouse general	7.71	9.72	67.86	3.35

	ROG	NOX	CO	PM10
TOTAL EMISSIONS (lbs/day)	24.81	32.22	224.82	11.09

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

MITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Single family housing	16.73	21.96	153.23	7.56
Condo/townhouse general	7.55	9.49	66.25	3.27

	ROG	NOX	CO	PM10
TOTAL EMISSIONS (lbs/day)	24.28	31.45	219.48	10.82

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

Pedestrian Environment

0 Side Walks/Paths: No Sidewalks
0 Street Trees Provide Shade: No Coverage

```
0               Pedestrian Circulation Access: No Destinations
0               Visually Interesting Uses: No Interest
0               Street System Enhances Safety: No Streets Designed this
Way
0               Pedestrian Safety from Crime: No Degree of Perceived Saf
ety
0               Visually Interesting Walking Routes: No Visual Interest

 3.8   <- Pedestrian Environmental Credit
 3.8  /19 = 0.20    <- Pedestrian Effectiveness Factor

Transit Service

0               Transit Service: Dial-A-Ride or No Transit Service

 0.0  <- Transit Effectiveness
 3.8  <- Pedestrian Factor
 3.8  <-Total
 3.8  /110 =    0.03   <-Transit Effectiveness Factor

Bicycle Environment

0               Interconnected Bikeways: No Bikeway Coverage
0               Bike Routes Provide Paved Shoulders: No Routes Provide t
hese Features
0               Safe Vehicle Speed Limits: No Routes
0               Safe School Routes: No Schools
0               Uses w/in Cycling Distance: No Uses
0               Bike Parking Ordinance: No Ordinance or Unenforceable

 4.0  <- Bike Environmental Credit
 4.0 /20 =      0.20  <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if
 the selected land uses do not constitute a mixed use.)

Transit Infrastructure Measures

% Trips Reduced             Measure
15              Credit for Existing or Planned Community Transit Service
0.5             Provide Street Lighting
 15.5            <- Totals

Pedestrian Enhancing Infrastructure Measures (Residential)

% Trips Reduced             Measure
2               Credit for Surrounding Pedestrian Environment
1               Provide Sidewalks and/or Pedestrian Paths
1               Provide Direct Pedestrian Connections
```

```
0.5             Provide Street Lighting
 4.5             <- Totals
```

Pedestrian Enhancing Infrastructure Measures (Non-Residential)

```
% Trips Reduced              Measure
2               Credit for Surrounding Pedestrian Environment
 2               <- Totals
```

Bicycle Enhancing Infratructure Measures (Residential)

```
% Trips Reduced              Measure
7               Credit for Surrounding Bicycle Environment
2               Provide Bike Lanes/Paths Connecting to Bikeway System
 9               <- Totals
```

Bike Enhancing Infrastructure Measures (Non-Residential)

```
% Trips Reduced              Measure
5               Credit for Surrounding Area Bike Environment
 5               <- Totals
```

Operational Measures (Applying to Commute Trips)

```
% Trips Reduced              Measure
 0               <- Totals
```

Operational Measures (Applying to Employee Non-Commute Trips)

```
% Trips Reduced              Measure
 0               <- Totals
```

Operational Measures (Applying to Customer Trips)

```
% Trips Reduced              Measure
 0               <- Totals
```

Measures Reducing VMT (Non-Residential)

```
VMT Reduced   Measure
 0               <- Totals
```

Measures Reducing VMT (Residential)

```
VMT Reduced   Measure
 0               <- Totals
```

Total Percentage Trip Reduction
with Environmental Factors and Mitigation Measures

Travel Mode	Home-Work Trips	Home-Shop Trips	Home-Other Trips
Pedestrian	0.10	0.40	0.40

Transit	0.54	0.12	0.14
Bicycle	1.80	1.80	1.80
Totals	2.43	2.31	2.34
Travel Mode	Work Trips	Employee Trips	Customer Trips
Pedestrian	0.04	0.40	0.40
Transit	0.54	0.01	0.54
Bicycle	1.00	1.00	1.00
Other	0.00	0.00	0.00
Totals	1.58	1.41	1.94

Changes Made to the Default Values

Operational/Vehicle Related:

URBEMIS 7G: Version 3.2

File Name: ENV261CM.URB
Project Name: Gilroy USA98-03 Commercial
Project Location: San Francisco Bay Area

DETAILED REPORT - Winter

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 40 Season: Winter

EMFAC Version: EMFAC7G (10/96)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Regnl shop. center > 5.00	36.50 trips / 1000 sq. ft.	590.00	21,535

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Duty Autos	75.00	1.16	98.58	0.26
Light Duty Trucks	10.00	0.13	99.54	0.33
Medium Duty Trucks	3.00	1.44	98.56	
Lite-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Med.-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Heavy-Heavy Trucks	5.00			100.00
Urban Buses	2.00			100.00
Motorcycles	3.00	100.00 % all fuels		

Travel Conditions

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0

5.0					
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0
10.0					
Trip Speeds (mph)	30	30	30	30	30
30					
% of Trips - Residential	27.3	21.2	51.5		
% of Trips - Commercial (by land use)					
Regnl shop. center > 570000 sf				2.0	1.0
97.0					

UNMITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Regnl shop. center > 5700	144.00	210.93	1334.85	75.23

	ROG	NOX	CO	PM10
TOTAL EMISSIONS (lbs/day)	144.00	210.93	1334.85	75.23

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

MITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Regnl shop. center > 5700	140.91	206.14	1304.52	73.52

	ROG	NOX	CO	PM10
TOTAL EMISSIONS (lbs/day)	140.91	206.14	1304.52	73.52

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

Pedestrian Environment

0	Side Walks/Paths: No Sidewalks
0	Street Trees Provide Shade: No Coverage
0	Pedestrian Circulation Access: No Destinations
0	Visually Interesting Uses: No Interest
0	Street System Enhances Safety: No Streets Designed this

Way
0 Pedestrian Safety from Crime: No Degree of Perceived Saf
ety
0 Visually Interesting Walking Routes: No Visual Interest

3.8 <- Pedestrian Environmental Credit
3.8 /19 = 0.20 <- Pedestrian Effectiveness Factor

Transit Service

0 Transit Service: Dial-A-Ride or No Transit Service

0.0 <- Transit Effectiveness
3.8 <- Pedestrian Factor
3.8 <-Total
3.8 /110 = 0.03 <-Transit Effectiveness Factor

Bicycle Environment

0 Interconnected Bikeways: No Bikeway Coverage
0 Bike Routes Provide Paved Shoulders: No Routes Provide t
hese Features
0 Safe Vehicle Speed Limits: No Routes
0 Safe School Routes: No Schools
0 Uses w/in Cycling Distance: No Uses
0 Bike Parking Ordinance: No Ordinance or Unenforceable

4.0 <- Bike Environmental Credit
4.0 /20 = 0.20 <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if
the selected land uses do not constitute a mixed use.)

Transit Infrastructure Measures

% Trips Reduced Measure
15 Credit for Existing or Planned Community Transit Service
2 Provide Transit Shelters Benches
0.5 Provide Street Lighting
17.5 <- Totals

Pedestrian Enhancing Infrastructure Measures (Residential)

% Trips Reduced Measure
2 Credit for Surrounding Pedestrian Environment
2 <- Totals

Pedestrian Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
2	Credit for Surrounding Pedestrian Environment
1	Provide Wide Sidewalks and Onsite Pedestrian Facilities
0.5	Provide Street Lighting
3.5	<- Totals

Bicycle Enhancing Infratructure Measures (Residential)

% Trips Reduced	Measure
7	Credit for Surrounding Bicycle Environment
7	<- Totals

Bike Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
5	Credit for Surrounding Area Bike Environment
5	<- Totals

Operational Measures (Applying to Commute Trips)

% Trips Reduced	Measure
0	<- Totals

Operational Measures (Applying to Employee Non-Commute Trips)

% Trips Reduced	Measure
0	<- Totals

Operational Measures (Applying to Customer Trips)

% Trips Reduced	Measure
0	<- Totals

Measures Reducing VMT (Non-Residential)

VMT Reduced	Measure
0	<- Totals

Measures Reducing VMT (Residential)

VMT Reduced	Measure
0	<- Totals

Total Percentage Trip Reduction
with Environmental Factors and Mitigation Measures

Travel Mode	Home-Work Trips	Home-Shop Trips	Home-Other Trips
Pedestrian	0.04	0.18	0.18
Transit	0.60	0.13	0.16
Bicycle	1.40	1.40	1.40
Totals	2.05	1.71	1.74
Travel Mode	Work Trips	Employee Trips	Customer Trips

Pedestrian	0.08	0.70	0.70
Transit	0.60	0.01	0.60
Bicycle	1.00	1.00	1.00
Other	0.00	0.00	0.00
Totals	1.68	1.71	2.30

Changes Made to the Default Values

Operational/Vehicle Related:

URBEMIS 7G: Version 3.2

File Name: ENV261CM.URB
Project Name: Gilroy USA98-03 Commercial
Project Location: San Francisco Bay Area

DETAILED REPORT - Summer

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC7G (10/96)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Regnl shop. center > 5	36.50 trips / 1000 sq. ft.	590.00	21,535.00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Duty Autos	75.00	1.16	98.58	0.26
Light Duty Trucks	10.00	0.13	99.54	0.33
Medium Duty Trucks	3.00	1.44	98.56	
Lite-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Med.-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Heavy-Heavy Trucks	5.00			100.00
Urban Buses	2.00			100.00
Motorcycles	3.00	100.00 % all fuels		

Travel Conditions

	Residential			Commercial	
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work Customer
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0 5.0

Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0
10.0					
Trip Speeds (mph)	30	30	30	30	30
30					
% of Trips - Residential	27.3	21.2	51.5		
% of Trips - Commercial (by land use)					
Regnl shop. center > 570000 sf				2.0	1.0
97.0					

UNMITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Regnl shop. center > 5700	99.03	184.69	808.14	75.23

	ROG	NOx	CO	PM10
TOTAL EMISSIONS (lbs/day)	99.03	184.69	808.14	75.23

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

MITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Regnl shop. center > 5700	96.98	180.49	789.78	73.52

	ROG	NOx	CO	PM10
TOTAL EMISSIONS (lbs/day)	96.98	180.49	789.78	73.52

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

Pedestrian Environment

0 Side Walks/Paths: No Sidewalks
0 Street Trees Provide Shade: No Coverage
0 Pedestrian Circulation Access: No Destinations
0 Visually Interesting Uses: No Interest
0 Street System Enhances Safety: No Streets Designed this Way
0 Pedestrian Safety from Crime: No Degree of Perceived Saf

```
ety
0               Visually Interesting Walking Routes: No Visual Interest

 3.8   <- Pedestrian Environmental Credit
 3.8  /19 = 0.20    <- Pedestrian Effectiveness Factor

Transit Service

0               Transit Service: Dial-A-Ride or No Transit Service

 0.0  <- Transit Effectiveness
 3.8  <- Pedestrian Factor
 3.8  <-Total
 3.8  /110 =    0.03   <-Transit Effectiveness Factor

Bicycle Environment

0               Interconnected Bikeways: No Bikeway Coverage
0               Bike Routes Provide Paved Shoulders: No Routes Provide t
hese Features
0               Safe Vehicle Speed Limits: No Routes
0               Safe School Routes: No Schools
0               Uses w/in Cycling Distance: No Uses
0               Bike Parking Ordinance: No Ordinance or Unenforceable

 4.0  <- Bike Environmental Credit
 4.0 /20 =      0.20  <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if
 the selected land uses do not constitute a mixed use.)

Transit Infrastructure Measures

% Trips Reduced              Measure
15              Credit for Existing or Planned Community Transit Service
2               Provide Transit Shelters Benches
0.5             Provide Street Lighting
 17.5            <- Totals

Pedestrian Enhancing Infrastructure Measures (Residential)

% Trips Reduced              Measure
2               Credit for Surrounding Pedestrian Environment
 2               <- Totals

Pedestrian Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced              Measure
2               Credit for Surrounding Pedestrian Environment
```

1	Provide Wide Sidewalks and Onsite Pedestrian Facilities
0.5	Provide Street Lighting
3.5	<- Totals

Bicycle Enhancing Infratructure Measures (Residential)

% Trips Reduced	Measure
7	Credit for Surrounding Bicycle Environment
7	<- Totals

Bike Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
5	Credit for Surrounding Area Bike Environment
5	<- Totals

Operational Measures (Applying to Commute Trips)

% Trips Reduced	Measure
0	<- Totals

Operational Measures (Applying to Employee Non-Commute Trips)

% Trips Reduced	Measure
0	<- Totals

Operational Measures (Applying to Customer Trips)

% Trips Reduced	Measure
0	<- Totals

Measures Reducing VMT (Non-Residential)

VMT Reduced	Measure
0	<- Totals

Measures Reducing VMT (Residential)

VMT Reduced	Measure
0	<- Totals

Total Percentage Trip Reduction
with Environmental Factors and Mitigation Measures

Travel Mode	Home-Work Trips	Home-Shop Trips	Home-Other Trips
Pedestrian	0.04	0.18	0.18
Transit	0.60	0.13	0.16
Bicycle	1.40	1.40	1.40
Totals	2.05	1.71	1.74

Travel Mode	Work Trips	Employee Trips	Customer Trips
Pedestrian	0.08	0.70	0.70
Transit	0.60	0.01	0.60

Bicycle	1.00	1.00	1.00
Other	0.00	0.00	0.00
Totals	1.68	1.71	2.30

Changes Made to the Default Values

Operational/Vehicle Related:

URBEMIS 7G: Version 3.2

File Name: ENV261T.URB
Project Name: Gilroy USA 98-03 total
Project Location: San Francisco Bay Area

DETAILED REPORT - Summer

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC7G (10/96)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Tr ips
Single family housing	10.40 trips / dwelling unit	90.00	936 .00
Condo/townhouse genera	7.10 trips / dwelling unit	57.00	404 .70
Regnl shop. center > 5	36.50 trips / 1000 sq. ft.	590.00	21,535 .00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	D iesel
Light Duty Autos	75.00	1.16	98.58	0.26
Light Duty Trucks	10.00	0.13	99.54	0.33
Medium Duty Trucks	3.00	1.44	98.56	
Lite-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Med.-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Heavy-Heavy Trucks	5.00			1 00.00
Urban Buses	2.00			1 00.00
Motorcycles	3.00	100.00 % all fuels		

Travel Conditions

	Residential		Commerci al
	Home-	Home-	Home-

	Work	Shop	Other	Commute	Non-Wor
k Customer					
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0
5.0					
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0
10.0					
Trip Speeds (mph)	30	30	30	30	30
30					
% of Trips - Residential	27.3	21.2	51.5		
% of Trips - Commercial (by land use)					
Regnl shop. center > 570000 sf				2.0	1.0
97.0					

UNMITIGATED EMISSIONS

	ROG	NOx	CO
PM10			
Single family housing	8.46	16.88	72.78
7.65			
Condo/townhouse general	3.93	7.30	31.47
3.31			
Regnl shop. center > 5700	99.03	184.69	808.14
75.23			

	ROG	NOx	CO
PM10			
TOTAL EMISSIONS (lbs/day)	111.42	208.86	912.39
86.18			

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

MITIGATED EMISSIONS

	ROG	NOx	CO
PM10			
Single family housing	8.32	16.54	71.34
7.50			
Condo/townhouse general	3.86	7.15	30.85
3.24			
Regnl shop. center > 5700	97.21	180.97	791.89
73.71			

	ROG	NOx	CO
PM10			
TOTAL EMISSIONS (lbs/day)	109.40	204.67	894.08
84.45			

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

Pedestrian Environment

0 Side Walks/Paths: No Sidewalks
0 Street Trees Provide Shade: No Coverage
0 Pedestrian Circulation Access: No Destinations
0 Visually Interesting Uses: No Interest
0 Street System Enhances Safety: No Streets Designed this Way
0 Pedestrian Safety from Crime: No Degree of Perceived Safety
0 Visually Interesting Walking Routes: No Visual Interest

3.8 <- Pedestrian Environmental Credit
3.8 /19 = 0.20 <- Pedestrian Effectiveness Factor

Transit Service

0 Transit Service: Dial-A-Ride or No Transit Service

0.0 <- Transit Effectiveness
3.8 <- Pedestrian Factor
3.8 <-Total
3.8 /110 = 0.03 <-Transit Effectiveness Factor

Bicycle Environment

0 Interconnected Bikeways: No Bikeway Coverage
0 Bike Routes Provide Paved Shoulders: No Routes Provide these Features
0 Safe Vehicle Speed Limits: No Routes
0 Safe School Routes: No Schools
0 Uses w/in Cycling Distance: No Uses
0 Bike Parking Ordinance: No Ordinance or Unenforceable

4.0 <- Bike Environmental Credit
4.0 /20 = 0.20 <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if the selected land uses do not constitute a mixed use.)

Transit Infrastructure Measures

% Trips Reduced	Measure
15	Credit for Existing or Planned Community Transit Service
0.5	Provide Street Lighting
15.5	<- Totals

Pedestrian Enhancing Infrastructure Measures (Residential)

% Trips Reduced	Measure
2	Credit for Surrounding Pedestrian Environment
1	Provide Sidewalks and/or Pedestrian Paths
1	Provide Direct Pedestrian Connections
0.5	Provide Street Lighting
4.5	<- Totals

Pedestrian Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
2	Credit for Surrounding Pedestrian Environment
0.5	Provide Street Lighting
2.5	<- Totals

Bicycle Enhancing Infratructure Measures (Residential)

% Trips Reduced	Measure
7	Credit for Surrounding Bicycle Environment
7	<- Totals

Bike Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
5	Credit for Surrounding Area Bike Environment
5	<- Totals

Operational Measures (Applying to Commute Trips)

% Trips Reduced	Measure
0	<- Totals

Operational Measures (Applying to Employee Non-Commute Trips)

% Trips Reduced	Measure
0	<- Totals

Operational Measures (Applying to Customer Trips)

% Trips Reduced	Measure
0	<- Totals

Measures Reducing VMT (Non-Residential)

VMT Reduced	Measure
0	<- Totals

Measures Reducing VMT (Residential)

VMT Reduced	Measure
0	<- Totals

Total Percentage Trip Reduction
with Environmental Factors and Mitigation Measures

Travel Mode	Home-Work Trips	Home-Shop Trips	Home-Other Trips
Pedestrian	0.10	0.40	0.40
Transit	0.54	0.12	0.14
Bicycle	1.40	1.40	1.40
Totals	2.03	1.91	1.94

Travel Mode	Work Trips	Employee Trips	Customer Trips
Pedestrian	0.05	0.50	0.50
Transit	0.54	0.01	0.54
Bicycle	1.00	1.00	1.00
Other	0.00	0.00	0.00
Totals	1.59	1.51	2.04

Changes Made to the Default Values

Operational/Vehicle Related:

URBEMIS 7G: Version 3.2

File Name: ENV261T.URB
Project Name: Gilroy USA 98-03 total
Project Location: San Francisco Bay Area

DETAILED REPORT - Winter

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2010 Temperature (F): 40 Season: Winter

EMFAC Version: EMFAC7G (10/96)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	10.40 trips / dwelling unit	90.00	936.00
Condo/townhouse genera	7.10 trips / dwelling unit	57.00	404.70
Regnl shop. center > 5	36.50 trips / 1000 sq. ft.	590.00	21,535.00

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Duty Autos	75.00	1.16	98.58	0.26
Light Duty Trucks	10.00	0.13	99.54	0.33
Medium Duty Trucks	3.00	1.44	98.56	
Lite-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Med.-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Heavy-Heavy Trucks	5.00			100.00
Urban Buses	2.00			100.00
Motorcycles	3.00	100.00 % all fuels		

Travel Conditions

	Residential	Commercial

	Home-Work	Home-Shop	Home-Other	Commute	Non-Wor
k Customer					
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0
5.0					
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0
10.0					
Trip Speeds (mph)	30	30	30	30	30
30					
% of Trips - Residential	27.3	21.2	51.5		
% of Trips - Commercial (by land use)					
Regnl shop. center > 570000 sf				2.0	1.0
97.0					

UNMITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Single family housing	11.23	18.80	110.32	7.65
Condo/townhouse general	5.11	8.13	47.70	3.31
Regnl shop. center > 5700	144.00	210.93	1334.85	75.23

	ROG	NOX	CO	PM10
TOTAL EMISSIONS (lbs/day)	160.34	237.86	1492.86	86.18

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

MITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Single family housing	11.03	18.43	108.14	7.50
Condo/townhouse general	5.03	7.97	46.76	3.24
Regnl shop. center > 5700	141.27	206.69	1308.00	73.71

	ROG	NOX	CO	PM10
TOTAL EMISSIONS (lbs/day)	157.33	233.08	1462.90	84.45

Includes correction for passby trips.

Does not include double counting adjustment for internal trips.

ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

Pedestrian Environment

0 Side Walks/Paths: No Sidewalks
0 Street Trees Provide Shade: No Coverage
0 Pedestrian Circulation Access: No Destinations
0 Visually Interesting Uses: No Interest
0 Street System Enhances Safety: No Streets Designed this Way
0 Pedestrian Safety from Crime: No Degree of Perceived Safety
0 Visually Interesting Walking Routes: No Visual Interest

3.8 <- Pedestrian Environmental Credit
3.8 /19 = 0.20 <- Pedestrian Effectiveness Factor

Transit Service

0 Transit Service: Dial-A-Ride or No Transit Service

0.0 <- Transit Effectiveness
3.8 <- Pedestrian Factor
3.8 <-Total
3.8 /110 = 0.03 <-Transit Effectiveness Factor

Bicycle Environment

0 Interconnected Bikeways: No Bikeway Coverage
0 Bike Routes Provide Paved Shoulders: No Routes Provide these Features
0 Safe Vehicle Speed Limits: No Routes
0 Safe School Routes: No Schools
0 Uses w/in Cycling Distance: No Uses
0 Bike Parking Ordinance: No Ordinance or Unenforceable

4.0 <- Bike Environmental Credit
4.0 /20 = 0.20 <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if the selected land uses do not constitute a mixed use.)

Transit Infrastructure Measures

% Trips Reduced	Measure
15	Credit for Existing or Planned Community Transit Service

0.5	Provide Street Lighting
15.5	<- Totals

Pedestrian Enhancing Infrastructure Measures (Residential)

% Trips Reduced	Measure
2	Credit for Surrounding Pedestrian Environment
1	Provide Sidewalks and/or Pedestrian Paths
1	Provide Direct Pedestrian Connections
0.5	Provide Street Lighting
4.5	<- Totals

Pedestrian Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
2	Credit for Surrounding Pedestrian Environment
0.5	Provide Street Lighting
2.5	<- Totals

Bicycle Enhancing Infratructure Measures (Residential)

% Trips Reduced	Measure
7	Credit for Surrounding Bicycle Environment
7	<- Totals

Bike Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
5	Credit for Surrounding Area Bike Environment
5	<- Totals

Operational Measures (Applying to Commute Trips)

% Trips Reduced	Measure
0	<- Totals

Operational Measures (Applying to Employee Non-Commute Trips)

% Trips Reduced	Measure
0	<- Totals

Operational Measures (Applying to Customer Trips)

% Trips Reduced	Measure
0	<- Totals

Measures Reducing VMT (Non-Residential)

VMT Reduced	Measure
0	<- Totals

Measures Reducing VMT (Residential)

VMT Reduced	Measure
0	<- Totals

Total Percentage Trip Reduction
with Environmental Factors and Mitigation Measures

Travel Mode	Home-Work Trips	Home-Shop Trips	Home-Other Trips
Pedestrian	0.10	0.40	0.40
Transit	0.54	0.12	0.14
Bicycle	1.40	1.40	1.40
Totals	2.03	1.91	1.94

Travel Mode	Work Trips	Employee Trips	Customer Trips
Pedestrian	0.05	0.50	0.50
Transit	0.54	0.01	0.54
Bicycle	1.00	1.00	1.00
Other	0.00	0.00	0.00
Totals	1.59	1.51	2.04

Changes Made to the Default Values

Operational/Vehicle Related:

URBEMIS 7G: Version 3.2

File Name: ENV261r.URB
Project Name: Gilroy USA 98-03
Project Location: San Francisco Bay Area

DETAILED REPORT - Winter

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2005 Temperature (F): 40 Season: Winter

EMFAC Version: EMFAC7G (10/96)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Tr ips
Single family housing	10.40 trips / dwelling unit	90.00	936 .00
Condo/townhouse genera	7.10 trips / dwelling unit	57.00	404 .70

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	D iesel
Light Duty Autos	75.00	1.16	98.58	0.26
Light Duty Trucks	10.00	0.13	99.54	0.33
Medium Duty Trucks	3.00	1.44	98.56	
Lite-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Med.-Heavy Duty Trucks	1.00	19.56	40.00	40.44
Heavy-Heavy Trucks	5.00			1 00.00
Urban Buses	2.00			1 00.00
Motorcycles	3.00	100.00 % all fuels		

Travel Conditions

	Residential				Commerci al
	Home-Work	Home-Shop	Home-Other	Commute	Non-Wor

k Customer					
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0
5.0					
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0
10.0					
Trip Speeds (mph)	30	30	30	30	30
30					
% of Trips - Residential	27.3	21.2	51.5		

UNMITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Single family housing	17.10	22.49	156.96	7.74
Condo/townhouse general	7.71	9.72	67.86	3.35

	ROG	NOX	CO	PM10
TOTAL EMISSIONS (lbs/day)	24.81	32.22	224.82	11.09

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

MITIGATED EMISSIONS

	ROG	NOx	CO	PM10
Single family housing	16.73	21.96	153.23	7.56
Condo/townhouse general	7.55	9.49	66.25	3.27

	ROG	NOX	CO	PM10
TOTAL EMISSIONS (lbs/day)	24.28	31.45	219.48	10.82

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

ENVIRONMENTAL FACTORS APPLICABLE TO THE PROJECT

Pedestrian Environment

0 Side Walks/Paths: No Sidewalks
0 Street Trees Provide Shade: No Coverage

0 Pedestrian Circulation Access: No Destinations
0 Visually Interesting Uses: No Interest
0 Street System Enhances Safety: No Streets Designed this Way
0 Pedestrian Safety from Crime: No Degree of Perceived Safety
0 Visually Interesting Walking Routes: No Visual Interest

3.8 <- Pedestrian Environmental Credit
3.8 /19 = 0.20 <- Pedestrian Effectiveness Factor

Transit Service

0 Transit Service: Dial-A-Ride or No Transit Service

0.0 <- Transit Effectiveness
3.8 <- Pedestrian Factor
3.8 <-Total
3.8 /110 = 0.03 <-Transit Effectiveness Factor

Bicycle Environment

0 Interconnected Bikeways: No Bikeway Coverage
0 Bike Routes Provide Paved Shoulders: No Routes Provide these Features
0 Safe Vehicle Speed Limits: No Routes
0 Safe School Routes: No Schools
0 Uses w/in Cycling Distance: No Uses
0 Bike Parking Ordinance: No Ordinance or Unenforceable

4.0 <- Bike Environmental Credit
4.0 /20 = 0.20 <- Bike Effectiveness Factor

MITIGATION MEASURES SELECTED FOR THIS PROJECT
(All mitigation measures are printed, even if the selected land uses do not constitute a mixed use.)

Transit Infrastructure Measures

% Trips Reduced	Measure
15	Credit for Existing or Planned Community Transit Service
0.5	Provide Street Lighting
15.5	<- Totals

Pedestrian Enhancing Infrastructure Measures (Residential)

% Trips Reduced	Measure
2	Credit for Surrounding Pedestrian Environment
1	Provide Sidewalks and/or Pedestrian Paths
1	Provide Direct Pedestrian Connections

0.5	Provide Street Lighting
4.5	<- Totals

Pedestrian Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
2	Credit for Surrounding Pedestrian Environment
2	<- Totals

Bicycle Enhancing Infratructure Measures (Residential)

% Trips Reduced	Measure
7	Credit for Surrounding Bicycle Environment
2	Provide Bike Lanes/Paths Connecting to Bikeway System
9	<- Totals

Bike Enhancing Infrastructure Measures (Non-Residential)

% Trips Reduced	Measure
5	Credit for Surrounding Area Bike Environment
5	<- Totals

Operational Measures (Applying to Commute Trips)

% Trips Reduced	Measure
0	<- Totals

Operational Measures (Applying to Employee Non-Commute Trips)

% Trips Reduced	Measure
0	<- Totals

Operational Measures (Applying to Customer Trips)

% Trips Reduced	Measure
0	<- Totals

Measures Reducing VMT (Non-Residential)

VMT Reduced	Measure
0	<- Totals

Measures Reducing VMT (Residential)

VMT Reduced	Measure
0	<- Totals

Total Percentage Trip Reduction
with Environmental Factors and Mitigation Measures

Travel Mode	Home-Work Trips	Home-Shop Trips	Home-Other Trips
Pedestrian	0.10	0.40	0.40

Transit	0.54	0.12	0.14
Bicycle	1.80	1.80	1.80
Totals	2.43	2.31	2.34
Travel Mode	Work Trips	Employee Trips	Customer Trips
Pedestrian	0.04	0.40	0.40
Transit	0.54	0.01	0.54
Bicycle	1.00	1.00	1.00
Other	0.00	0.00	0.00
Totals	1.58	1.41	1.94

Changes Made to the Default Values

Operational/Vehicle Related:



Planning for Success.

FINAL
SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

BARBERI URBAN SERVICE AREA AMENDMENT (04-02)

SCH# 1998102079

PREPARED FOR

City of Gilroy

November 15, 2005

EMC PLANNING GROUP INC.
A LAND USE PLANNING & DESIGN FIRM

301 Lighthouse Avenue Suite C Monterey California 93940 Tel 831-649-1799 Fax 831-649-8399
www.emcplanning.com

BARBERI URBAN SERVICE AREA AMENDMENT (04-02)

Final
Subsequent Environmental Impact Report

SCH #1998102079

PREPARED FOR
City of Gilroy
Cydney Casper, Planner II
7351 Rosanna Street
Gilroy, CA 95020
Tel 408.846.0400

PREPARED BY
EMC Planning Group Inc
301 Lighthouse Avenue Suite C
Monterey CA 93940
Tel 831.649.1799
Fax 831.649.8399
contactus@emcplanning.com
www.emcplanning.com

November 15, 2005

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1.0 Introduction

Purpose and Organization

The City of Gilroy, acting as the lead agency, determined that the proposed Barberi Urban Service Area Amendment (hereinafter "proposed project") might result in significant adverse environmental effects, as defined by the California Environmental Quality Act (CEQA) Guidelines section 15064. Therefore, the City of Gilroy had a draft environmental impact report (Draft EIR) prepared to evaluate the potentially significant adverse environmental impacts of the project. The Draft EIR was prepared subsequent to the *Gilroy Sports Park and Urban Service Area Amendment (USA 98-03) EIR* (1999) and the *Gilroy Urban Service Area Amendment 98-03 Subsequent EIR* (2000) in accordance with section 15162 of the CEQA Guidelines. The Draft EIR was circulated for public review between August 26, 2005 and October 10, 2005, and public comment was received. CEQA Guidelines section 15200 indicates that the purposes of the public review process include sharing expertise, disclosing agency analysis, checking for accuracy, detecting omissions, discovering public concerns, and soliciting counter proposals.

This Final EIR has been prepared to address comments received during the public review period and, together with the Draft EIR, constitutes the complete Barberi Urban Service Area Amendment Subsequent EIR.

This Final EIR is organized into the following sections:

- **Section 1** contains this introduction to the Final EIR.
- **Section 2** contains written comments on the Draft EIR, as well as the responses to those comments.
- **Section 3** contains a revised summary of the Draft EIR, identifying the changes in the impacts and mitigation measures resulting from comments on the Draft EIR.
- **Section 4** contains the revisions to the text of the Draft EIR resulting from comments on the Draft EIR.
- **Section 5** contains the mitigation monitoring program.

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2.0 Comments on the Draft EIR

This section complies with CEQA Guidelines section 15088(c), which states, "The response to comments may take the form of... a separate section in the final EIR." This section is dedicated to presenting the comments and the City of Gilroy's responses to those comments.

CEQA Guidelines section 15132(c) requires that the Final EIR contain a list of persons, organizations, and public agencies that have commented on the Draft EIR. A list of the correspondence received during the public review period is presented below.

CEQA Guidelines sections 15132(b) and 15132(d) require that the Final EIR contain the comments that raise significant environmental points in the review and consultation process, and written response to those comments. A copy of each correspondence received during the public review period is presented on the following pages. The responses correspond to numbering systems in the letters or added along the left-hand side of the letter as necessary. A response to each comment that raises a significant environmental point is presented immediately following the letter. Where required, revisions have been made to the text of the Draft EIR based on the responses to comments, and these are included in Section 4.0, Changes to the Draft EIR.

The 45-day public review period ended on October 10, 2005. The following correspondence was received:

- County of Santa Clara Roads and Airports Department (September 28, 2005)
- Santa Clara Valley Transportation Authority (VTA) (September 30, 2005)
- Giacalone-McDermott Management LLC (October 3, 2005)
- California Department of Fish and Game (October 6, 2005)
- Santa Clara Valley Water District (October 11, 2005)
- California Department of Transportation (October 11, 2005)

Table 1 summarizes the significant environmental comments received in each comment letter.

TABLE 1

Summary of Environmental Comments

Environmental Issues	County of Santa Clara Roads and Airports Dept.	VTA	Giacalone-McDermott	Fish and Game	SCVWD	Caltrans
No Issue		✓				
Agricultural Resources			✓			
Biological Resources			✓	✓		
Noise			✓			
Public Services					✓	
Transportation	✓		✓			✓
Hydrology					✓	
Alternatives			✓			

Source: EMC Planning Group Inc.

County of Santa Clara

Roads and Airports Department
Land Development and Permits

101 Skyport Drive
San Jose, California 95110-1302
(408) 573-2460 FAX (408) 441-0275

RECEIVED
SEP 29 2005
Gilroy Planning Div.

September 28, 2005

Ms. Cydney Casper, Planner II
City of Gilroy
Planning Division
7351 Rosanna Street
Gilroy, CA 95020

Subject: USA 04-02
Barberi Urban Service Area Amendment Draft EIR (Environmental Impact Report)

Dear Ms. Casper,

Your August 26, 2005 letter along with the attachments for the subject project have been reviewed. Our comments are as follows:

1. Please submit a traffic study and plans for our review and approval. The plans should indicate the proposed access to the subject site and evaluate the impact on Monterey Road as indicated on Page S-5.

Thank you for the opportunity to review and comment on this application. If you have any questions, please call me at (408)-573-2464.

Sincerely,

Ralu**c**a Nitescu
Project Engineer

Cc: SK, WRL, File

Board of Supervisors: Donald F. Gage, Blanca Alvarado, Pete McHugh, James T. Beall Jr., Liz Kniss
County Executive: Peter Kutras, Jr.

LETTER 1 - Response to the letter from the County of Santa Clara Roads and Airports Department (September 28, 2005).

1. The Traffic Impact Analysis is included as Appendix G of the Draft Subsequent Environmental Impact Report. Because the proposed project is an urban service area amendment, and no development plans have been submitted, there are no access details.

SANTA CLARA
Valley Transportation Authority

September 30, 2005

City of Gilroy
Community Development Department
7351 Rosanna Street
Gilroy, CA 95020

Attention: Cydney Casper

Subject: City File No. USA 04-02 / Barberi Urban Service Amendment

Dear Ms. Casper:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the Draft EIR for an urban service amendment to include 27 acres designated as Neighborhood District, including 18,000 square feet of commercial uses and 250 residential uses, located south of Luchessa Avenue, west of Monterey Road. We have no comments on the proposed project at this time.

Thank you for the opportunity to review this project. If you have any questions, please call me at (408) 321-5784.

Sincerely,

R Mol

Roy Molseed
Senior Environmental Planner

RM:kh

LETTER 2 - Response to the letter from the Santa Clara Valley Transportation Authority (September 30, 2005).

1. No comment was provided therefore no response is needed.

GIACALONE-MCDERMOTT MANAGEMENT, LLC
6300 MONTEREY ROAD
GILROY, CALIFORNIA 95020
PH: (408) 842-9655
FX: (408) 846-6207

VIA HAND DELIVERY

RECEIVED
OCT 04 2005
Gilroy Planning Div.

Monday, October 03, 2005

Cydney Casper
Community Development Department - Planner
7351 Rosanna Street
Gilroy, CA 95020
PH: (408) 846-0440
FX: (408) 848-0429
ccasper@ci.gilroy.ca.us

Re: Barberi Urban Service Area Amendment (04-02)
Supplemental Environmental Impact Report
Applicant Comments

Dear Cydney:

Attached herewith please find a list of our comments relative to the SEIR prepared by EMC Planning Group, Inc. dated August 24, 2005 for the Barberi Property USA Amendment. I think you will note the written comments attached herewith are in compliance with the discussions we have held at our Barberi Property monthly meetings. We would like to see the revisions incorporated into the final draft of the SEIR.

If you have any questions or comments please feel free to contact myself or any of the consultants at anytime.

Sincerely;

Michael McDermott
Giacalone McDermott Management, LLC

cc: Lee Wieder w/ENC
File: Thomas Road P-170 w/ENC

Comments to Draft Subsequent EIR
Barberi USA Amendment (04-02)

1. **Background** (p1-15)

The project site was part of proposed USA Amendment 98-03, ...
On March 18, 2002 the City certified the USA Amendment SEIR.....

[Insert after Last Paragraph of Background]

On September 16, 2002, at the request of LAFCO, the City Council pre-zoned the three parcels comprising the Sports Park facility to PF (Park/Public Facility) and directed staff to initiate a re-zoning of the properties immediately north of the Sports Park facility to Neighborhood District and General Commercial. The property must be pre-zoned prior to LAFCO's consideration.

On October 3, 2002, the City Planning Commission voted unanimously to forward a recommendation of approving the pre-zoning and Urban Service Area amendment of the adjacent parcels to the north of the sports park.

On October 9, 2002 LAFCO did not approve the amendment of the City's USA to include the sports park nor the parcels north of the sports park due to the lack of existing City Agricultural Mitigation Program contemplated I the City's General Plan Environmental Impact Report. LAFCO was prepared, however, to annex the sports park property if the City agreed to apply to the sports park property its pending General Plan Agricultural Mitigation Policy.

On October 15, 2002, the City Council withdrew from LAFCO's invitation for annexation of the three Sports Park facility parcels because Council's position was the city property, specifically the the sports park, serves the public's interest and should be exempt from the Agricultural Mitigation policy. In addition, with the property owners' concurrence, the Council withdrew the pre-zone application for the parcels north of the sports park.

The property owners agreed to withdraw the application and not re-apply until the City adopted an Agricultural Mitigation Program that was consistent with the adopted General Plan Environmental Impact Report.

On May 3, 2004, the City adopted an Agricultural Mitigation Policy, consistent with the adopted General Plan EIR.

In, June, 2004, re-application was made to amend the city's urban service area to include the project site.

2. **Urban Service Area Amendment Policy 3** (p1-19e) (The following underlined comments address more directly and with more details how the conversion of the project site from agricultural to urban uses is not premature. It is important to specify the details of the early phases of the Sports Park construction so that it is realized how the area is undergoing urbanization, even faster than the "Alternative Location" identified in the Alternative Section of the Draft EIR)

The conversion of this agricultural and open space land is not premature. The project site has been in the City of Gilroy 20-year planning area.... . The land immediately south is the developing sports park, the first phase of which is currently under construction, which includes some of the following urban improvements to the area:

a. recycled water line in Monterey Road, new median curbs, new median irrigation system, and new median landscaping on Monterey Road between Luchessa Avenue & 101, new drainage system and concrete gutter on the east side of Monterey Road south of Luchessa Ave;

b. A 12-foot wide, 3,400 feet long asphalt emergency address road/bike trail along the Uvas Creek levee, a retaining wall, 650 feet long concrete entry road, a 2.5- acre concrete parking lot, 10 acres of sports fields including there (3) baseball diamonds and one soccer/football field, a 4,000 square foot siltation basin with a 950 foot long asphalt access road, three(3) wooden score booth structures, one restroom and concession structure, three (3) scoreboards, twelve (12) sport field high mast luminaries, one gate house structure, one park office

3. The project site will be adjacent to non-agricultural developed uses on its entire periphery..... .

Urban Service Area Amendment Policy 3 (j,k,& l added) These additions became effective January 1, 2003 and the EIR consultant should respond to the most current LAFCO policies.

These additional policies were omitted from the DRAFT SEIR and should be added and addressed by the SEIR consultant, EMC:

j. Regional housing needs;
k. Availability of adequate water supply; and
l. Consistency with city or county general and specific plans.

4. **Urban Service Area Amendment Policy 4** (p1-20)

Language was added to this policy as of January 1, 2003. The underlined wording is the added language

"When a city with a substantial supply of vacant land within its Urban Service Area applies for an Urban Service Area expansion, LAFCO will require an explanation of why the expansion is necessary, why infill development is not undertaken first, and how an orderly, efficient growth pattern, consistent with LAFCDO mandates, will be maintained."

Discussion. The City conducted a residential vacant land analysis.... The vacant land analysis concluded that the City's total residential supply (for all densities combined) was 11 years.

Although there is eleven (11) years of vacant residential supply of land yet to be developed in the urban service area, most of it is targeted in the western and northwestern quadrants of the city. Until recently these growth areas were identified primarily through specific plans as the Glen Loma Specific Plan and Hecker Pass Specific Plan. Together, these two plans constitute 58% of the vacant land in the urban service area or almost 6 ½ years out of the 11 years. Another way of evaluating this 11 year supply of vacant residential land is recognize that 7.5 years out of 11 years of supply is designated as Neighborhood District and that Glen Loma Specific Plan area represents 4.8 years of this and only 2.7 year supply is the balance for Neighborhood District land use designation. The inclusion of the project site would contribute positively to this low supply of only 2.7 years of vacant residential land for a Neighborhood District designation. This is important because it is in the Neighborhood District land use designation that the City is directing orderly and efficient growth of residential supported by neighborhood serving commercial.

The project site has been identified as its own Neighborhood District area. The project site has been in the city's 20-year growth boundary for over 25 years and already once has been approved to be included in the Urban Service Area and pre-zoned Neighborhood District by the City Planning Commission.

The policies of this New Neighborhood District will result in a planned, orderly and efficient urban development pattern which requires providing medium and high density residential near commercial uses. These increased densities and the City's recently adopted 15% BMR requirement address LAFCO's considerations for cities to meet its Regional housing needs. (LAFCO's Urban Service Area Amendment Policy #3j, Regional housing needs.)

In addition, the immediacy for developing this Neighborhood District is demonstrated by the fact that the construction of the adjacent city's sports park is moving forward rapidly and will further adversely impact agricultural operations that are already negatively impacted by other surrounding urban uses.

The orderly, efficient growth pattern of the city is further regulated by the City's General Plan Circulation Element and the build-out of Luchessa Road from 2-lanes to 4-lanes west of Monterey as part of developing the project site is consistent with the City's Circulation Element.

Another location than the project site for following the Neighborhood District policies is the "Alternate Location" described in the Alternative Section of the Draft EIR. This Alternate Location is considered an infill site because it is within city limits (p3-12). Although this location is within the city limits, the project site may develop sooner because of the urban uses immediately surrounding it, especially with the expeditious development of the city's sport's park, and available infrastructure.

In summary, although there is more than 5 years of vacant land in the urban service area the expansion of the urban service area is necessary for the following reasons:

1. Directs growth to Neighborhood Districts which is a planning tool for an orderly, efficient growth pattern, consistent with LAFCO mandates.

2. Addresses how to meet Regional housing needs;

3. Acknowledges that with the immediate commencement of developing an adjacent 78-acre city sports park and with the other surrounding urban uses agricultural operations are negatively impacted on the project site. Also, with the current development of the sports park, utilities and service systems are readily available to the project site as well as automobile circulation and pedestrian access from Monterey Street and Luchessa Avenue.

4. Recognizes that infill locations, like the alternative location described in the Alternative Section of the Draft EIR, may not develop prior to the project site. (See discussion under Alternative Section.)

5. Recognizes that over 1-acre of the project site will be required for widening Luchessa as part of the City's General Plan Circulation Element, all of which contributes to the orderly, efficient growth pattern of the city.

5.

Alternative #2 – Alternative Location (p 3-10)

There are six parcels totaling 38.78 acres and 2.25 acres of that total are the SCVWD parcel with a drainage channel. (See attached parcel map) In addition, access is presently available from Monterey Street and Vickery Avenue. (See other attached parcel map) Cohansey Avenue is planned to extend through the western portion of the site, Church Street and Wren are planned to extend from their present locations through the northern portions of the site. However, Church Street cannot be extended until development occurs between the existing terminus of Church

Street and the "alternate location." Wren Avenue cannot be extended until development occurs between the intersection of Wren Avenue and Vickery and the "alternate location."

Even though this "alternate location" is about 10.5 acres more than the project site (Area for actual development is 36.5 minus 26 acres), it is assumed that the alternate location would be developed with the same number of residential units, in a mix of residential densities similar to the proposed project within the Neighborhood District area, and with the same areas of neighborhood-serving types of commercial uses within the General Services Commercial area.

Although the "alternate location" is within the city limits, the project site is similar to the project site in all areas except for "agricultural resources" and "public services." This similarity includes "Utilities and Service Systems," which the Draft EIR purports to be superior in the "alternate location, because being in the City limits, it has already been planned for services by the City." However it needs to be recognized that the project site too has utilities and service systems available to it as a result of the development of the city's adjacent sports park, even though that development is being permitted through the County. As a matter of fact some of these services as water and sewer are closer to the subject property than they are at this alternate location. For example, for the subject site water connection is within 300 ft, and with the alternate location it is 500 ft.

Utilities and Service Systems (pages 3-18 & 3-19)

This alternative location is not superior to the proposed project in terms of utilities and service systems. The alternate location, if anything, is more similar/same in terms of utilities and service systems and this should be corrected in Table 20, page 3-19 entitled "Alternatives Comparison."

6.

Summary of Project Effects (p S-2)

Biological Resources (p S-2)
Potentially Significant Impact - Raptor Nests. Cottonwood and sycamore trees present near the project site have the potential to provide suitable nesting habitat for raptors. If there were active nest(s) of protected bird species present, construction and site preparation activities, if conducted during the nesting season, could result in the direct loss of nests, including eggs and young, or the abandonment of an active nest by the adults.

Summary of Mitigation - Pre-construction surveys for nesting raptors will be conducted by a qualified biologist if construction is to occur during the nesting season (April 15 – August 1) to reduce impacts to a less than significant level. Every effort will be made to avoid removal or impact to known raptor nests within project boundaries. If trees known to support raptor nests cannot be avoided, removal of these trees will only occur during the non-breeding season.

[This Potentially significant impact shall be removed in it's entirety. The Barberi property at it's nearest location is not within the 50' range identified in the comment. Se Attached exhibit.]

7

Potentially Significant Impact - Establishment of Non-native Plants. A number of invasive species listed on the California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* (CALEPC 1999) are present adjacent to the project site within the City of Gilroy's ROW on Luchessa Road, including milk thistle (*Silybum marianum*) and bull thistle (*Cirsium vulgare*). The project site is diked and no native plants are currently growing at the project site.

Summary of Mitigation -

Deleted: Potentially Significant Impact - Waters of the U.S. Uvas Creek is located approximately 50 feet from the western boundary of the project site. No other rivers, streams, or ponded areas that would be considered waters of the U.S. or wetlands are present on the project site. Disturbance to Uvas Creek is would be a potentially significant impact resulting from construction on the portions of the project site nearest to Uvas Creek.

Summary of Mitigation - Prior to future development activities, a 50-foot setback from the high water mark of Uvas Creek shall be established for the protection of the water corridor. Grading and equipment shall not be allowed within this setback. If disturbance is proposed within or above the creek bed, a Section 404 permit shall be obtained,

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Deleted: and would also create the disturbed environment preferred by invasive species,

Deleted: In order to prevent the spread of invasive non-native species,

The project proponent shall prepare a landscaping plan. Exposed soil areas shall be planted, mulched, or covered between October 15 and the following April 15 each year; plant materials used in landscaping, erosion control, or habitat restoration shall consist of plants that are included in an appropriate native California plants as identified by a qualified biologist or landscape architect; and to prevent erosion and conserve water, bare soil between newly installed plant materials shall be mulched, covered with jute netting, or seeded with a mix of seeds best suited for the climate and soil conditions, and native to the Gilroy region.

8 **Noise (p S-4)**
Potentially Significant Impact - Short-Term Construction Noise. Short-term noise could occur from construction activities at the project site. The temporary elevation of noise may pose a significant impact to nearby residents.

Summary of Mitigation - Prior to issuance of a grading permit, the following measures shall be incorporated into the project plans to mitigate construction noise: Construction shall be limited to weekdays between 7 AM and 7 PM and Saturdays and holidays between 9 AM and 7 PM, with no construction on Sundays or holidays; All internal combustion engine-driven equipment shall be equipped with mufflers that are in good condition and appropriate for the equipment; and Stationary noise-generating equipment shall be located as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.

Significant Impact - Noise Exposure at Proposed Residences in Excess of City Standards. Proposed residences on the project site along Monterey Street and Luchessa Avenue would experience noise levels that exceed the City's standards for residences.

Summary of Mitigation - When residential development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. If residential lots are proposed within 235 feet south of the Luchessa Avenue centerline (195 feet from the present property line), or within 470 feet of the centerline of Monterey Street, up to a nine-foot tall noise barrier may be required between the lots and Luchessa Avenue or Monterey Street.

9 Significant Impact - Noise Exposure at Proposed Commercial. Proposed commercial buildings, on the project site along Monterey Street and Luchessa Avenue, may experience exterior noise levels that exceed City's standards.

Summary of Mitigation - When commercial development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. Developer shall install doors and windows fronting Luchessa Avenue and Monterey with sufficient STC ratings to comply with the City's interior CNEL rating of 45.

10 Significant Impact - Noise Impaction Existing Residences North of Luchessa Avenue. Traffic generated by the proposed project would increase ambient noise levels along Luchessa Avenue by one to two decibels.

Summary of Mitigation - The developer shall review the existing barrier along Luchessa Avenue to determine if a three-foot high extension could be added. If this is not effective and/or feasible, a new, nine-foot high barrier shall be constructed in its place. The City shall provide the Developer with the appropriate licensing agreements between the City and the existing residents in order for this mitigation work to be completed.

11 Significant Impact - Sports Park-generated Noise. Sports park noise at the southern boundary of the project site would exceed City standards for residential uses.

Summary of Mitigation - Prior to issuance of building permits for residences with yards

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within 175 feet of the sports park, the applicant shall demonstrate that noise levels at residential yards are in compliance with the standards of Gilroy General Plan Policy 26.02.

Potentially Significant Impact - Residential Interior Noise Levels. Traffic noise would result in interior noise levels in existing and proposed residences in excess of City standards.

Summary of Mitigation - Subject to the review and approval of the City of Gilroy Building Division, the applicant for any residential development on the project site shall conduct an acoustical study.

Traffic/Transportation (p S-5)
Potentially Significant Impact - Left turn Delays at Monterey Street/Tenth Street Intersection. This intersection would operate at an acceptable level of service during project conditions. However, the permitted phasing for the eastbound and westbound left-turn movements causes excessive delays for left-turning vehicles.

Summary of Mitigation- The developer of the first project on the project site shall install a full eight-phase signal operation at the Monterey Street/Tenth Street intersection, to provide protected left turns on the eastbound and westbound approaches and increase the capacity of the left-turn movement.

Potentially Significant Impact - Commercial Site Access. Access to the commercial site from Monterey Street could result in conflicts with other movements along Monterey Street.

Summary of Mitigation - Prior to Architectural and Site Review Approval for the commercial area or high-density residential uses along Monterey Street, a traffic study shall be performed to evaluate traffic flow and turning movements along Monterey Street and Luchessa Avenue.

12 Potentially Significant Impact - Pedestrian and Bicycle Circulation. Continuous sidewalks are not provided on the south side of Luchessa Avenue, restricting pedestrian access in and around the project site, and resulting in a potentially dangerous pedestrian environment.

Summary of Mitigation- The developer shall construct frontage improvements along Luchessa Avenue and Monterey Street concurrent with adjacent development on the project site. Site plans and tentative maps shall include the following bicycle and pedestrian connections: a connection to the Uvas Creek trail; a connection near the center of the project site to the Sports Park; and a connection between the commercial and residential areas. These improvements are included in the City's Transportation Master Plan and therefore, impact fees are collected for improvements on these roadways. The Developer shall receive an impact fee credit, subject to the City of Gilroy Master Fee Program, equal to the cost of each improvement divided by the number of units upon the issuance of each building permit and the payment of each impact fee.

13 ***Significant Cumulative Effects (p S-6)***
Significant Impact - Luchessa Avenue/Thomas Road Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during both peak hours.

Significant Impact - Luchessa Avenue/Princevalle Street Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during both peak periods.

Significant Impact - Monterey Street/Luchessa Avenue Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during the PM peak hour.

Significant Impact - Monterey Street/Tenth Street Intersection. Under cumulative conditions, this intersection would operate at unacceptable level of service (LOS E-) during the PM peak hour.

Summary of Mitigation - The following improvements are included in the City's Transportation Master Plan, excepting Monterey Street & Tenth Street Mitigation Measure which is not included in the City's traffic fee program and therefore impact fees are collected for work at this intersection. The developer shall receive an impact fee credit equal to the cost of each improvement divided by the number of units upon the issuance of each building permit and the payment of each impact fee. Mitigation Measure 24.4 is not included in the City's fee program and shall be borne by Developer at it's sole cost. The project that triggers unacceptable levels of service at these locations will be required to design and construct the improvements.

Luchessa Avenue and Thomas Road: a traffic signal or traffic circle; Luchessa Avenue and Princevalle Street: a traffic signal;

Monterey Street and Luchessa Avenue: an additional northbound left-turn lane and widening of the west leg to provide two receiving lanes for the northbound left-turning vehicles;

Monterey Street and Tenth Street: a second southbound left-turn lane, a westbound overlap phase, one left-turn lane, two through lanes, and one separate right-turn lane on northbound Monterey Street.

The project that triggers unacceptable levels of service at these locations will be required to design and construct the improvements and submit their costs to the City for reimbursement our of the traffic impact fee program funds.

Deleted: If the following improvement s, or equivalent as determined by¶ the Gilroy Engineering Division, are not included in the City's traffic fee program at the¶ time traffic impact fees are paid, the developer shall pay a pro-rata share of the cost of¶ each improvement not included in the fee program in addition to standard traffic impact¶ fees:

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Significant Unavoidable Impacts (p S-7)

14

Agricultural Resources (p S-7)

Significant and Unavoidable Impact - Loss of Prime Agricultural Land. The proposed project would result in the loss of 25.2 [portions of the annexation are already being constructed by the City of Gilroy, currently house commercial business or contain an abandoned telephone switching station and therefore should not be included in the acreage count] acres of prime farmland that has a LESA score that indicates agricultural land of significant value.

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Summary of Mitigation - Implementation of the City's Agricultural Mitigation Policy would be required. However, the impact would still be considered significant and unavoidable.

15

Cumulative Impacts (p 3-6)

Significant Impact - Luchessa Avenue/Thomas Road Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during both peak hours. City staff has discussed the implementation of a traffic signal or roundabout at the Luchessa Avenue/Thomas Road intersection. This improvement would result in LOS A (7.6 seconds of delay) and LOS C (23.7 seconds of delay) under cumulative conditions during the AM and PM peak hours, respectively. Implementation of the mitigation measure presented below would reduce cumulative

impacts to a less than significant level.

Significant Impact - Luchessa Avenue/Princevalle Street Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during both peak periods. Signalization of this intersection would result in LOS B+ during both peak hours. Implementation of the mitigation measure presented below would reduce cumulative impacts to a less than significant level.

Significant Impact - Monterey Street/Luchessa Avenue Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during the PM peak hour. The *City of Gilroy Traffic Circulation Master Plan* designates Luchessa Avenue to provide four lanes along the project frontage. As identified in the Capital Improvement Budget Plan the eastbound approach of this intersection provides one left-turn lane, two through lanes, and one separate right-turn lane. The planned improvements would not result in acceptable levels of service at cumulative conditions. Implementation of the mitigation measure presented below would reduce cumulative impacts to a less than significant level.

Significant Impact - Monterey Street/Tenth Street Intersection. Under cumulative conditions, this intersection would operate at unacceptable level of service (LOS E-) during the PM peak hour. Implementation of the mitigation measure identified Section 2.6 Traffic/Transportation would partly reduce this impact, but not to a less than significant level. The cumulative impact at the Monterey Street/Tenth Street intersection would be mitigated with the implementation of a second southbound leftturn lane, a westbound overlap phase, and providing one left-turn lane, two through lanes, and one separate right-turn lane would result in LOS D (48.6 seconds of delay) during the PM peak hour under cumulative conditions. This mitigation would likely require some right-of-way to accommodate this improvement. Therefore, an engineering study needs to be completed to determine the extents of the roadway that may be required to implement this improvement. Implementation of the mitigation measure presented below would reduce cumulative impacts to a less than significant level.

Mitigation Measure (p 3-7)

24. The following improvements are included in the City's Transportation Master Plan, excepting Mitigation Measure 24.4 which is not included in the City's traffic fee program and therefore impact fees are collected for work at this intersection. The developer shall receive an impact fee credit equal to the cost of each improvement divided by the number of units upon the issuance of each building permit and the payment of each impact fee. Mitigation Measure 24.4 is not included in the City's fee program and shall be borne by Developer at it's sole cost. The project that triggers unacceptable levels of service at these locations will be required to design and construct the improvements.

1. Luchessa Avenue and Thomas Road: a traffic signal or traffic circle;

2. Luchessa Avenue and Princevalle Street: a traffic signal;

3. Monterey Street and Luchessa Avenue: an additional northbound left-turn lane and widening of the west leg to provide two receiving lanes for the northbound left-turning vehicles;

4. Monterey Street and Tenth Street: a second southbound left-turn lane, a westbound overlap phase, one left-turn lane, two through lanes, and one separate right-turn lane on northbound Monterey Street.

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The development that triggers the improvements is responsible for the design and construction of the mitigation measure. If the improvements are traffic impact fee related, the developer will be reimbursed by the City

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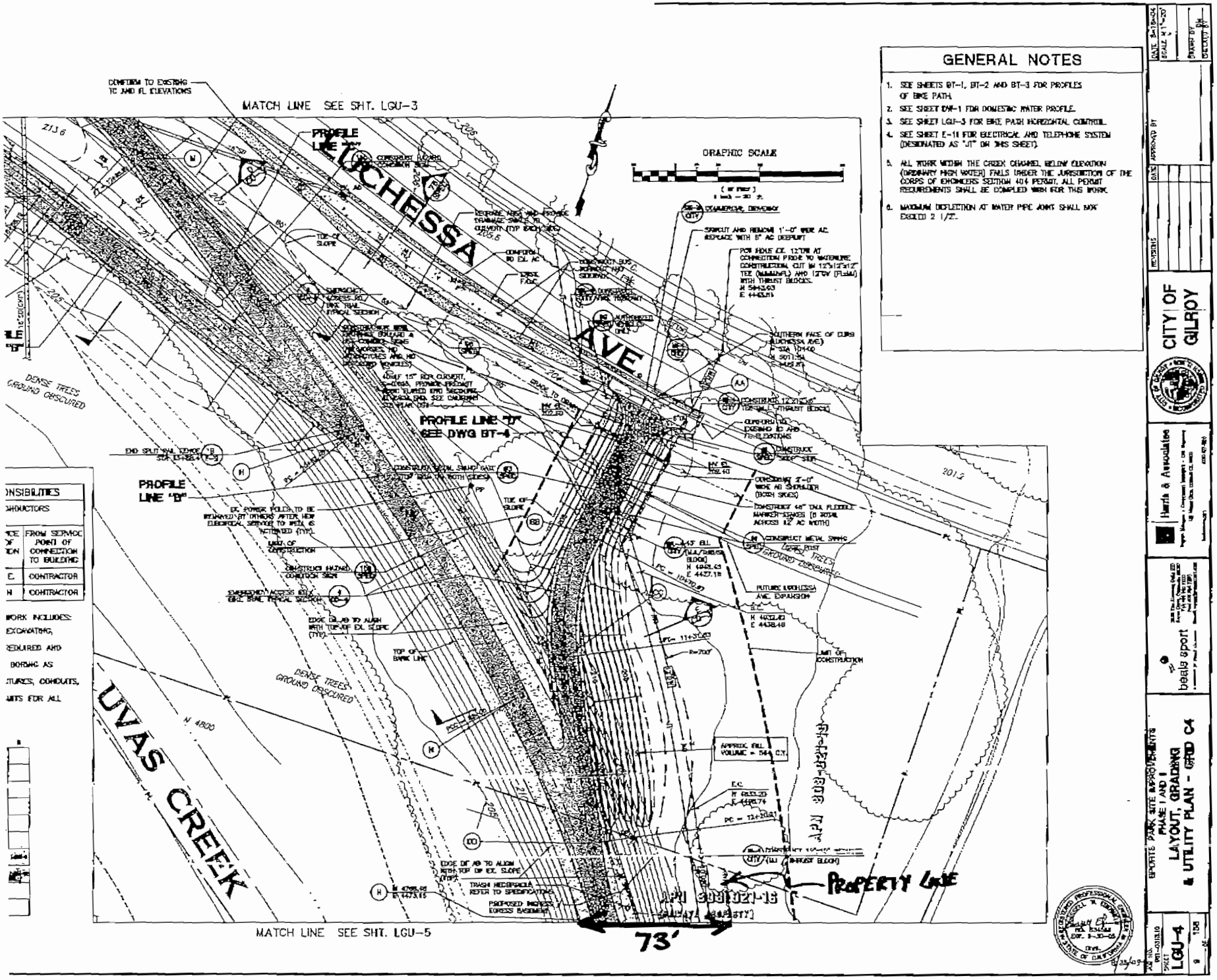
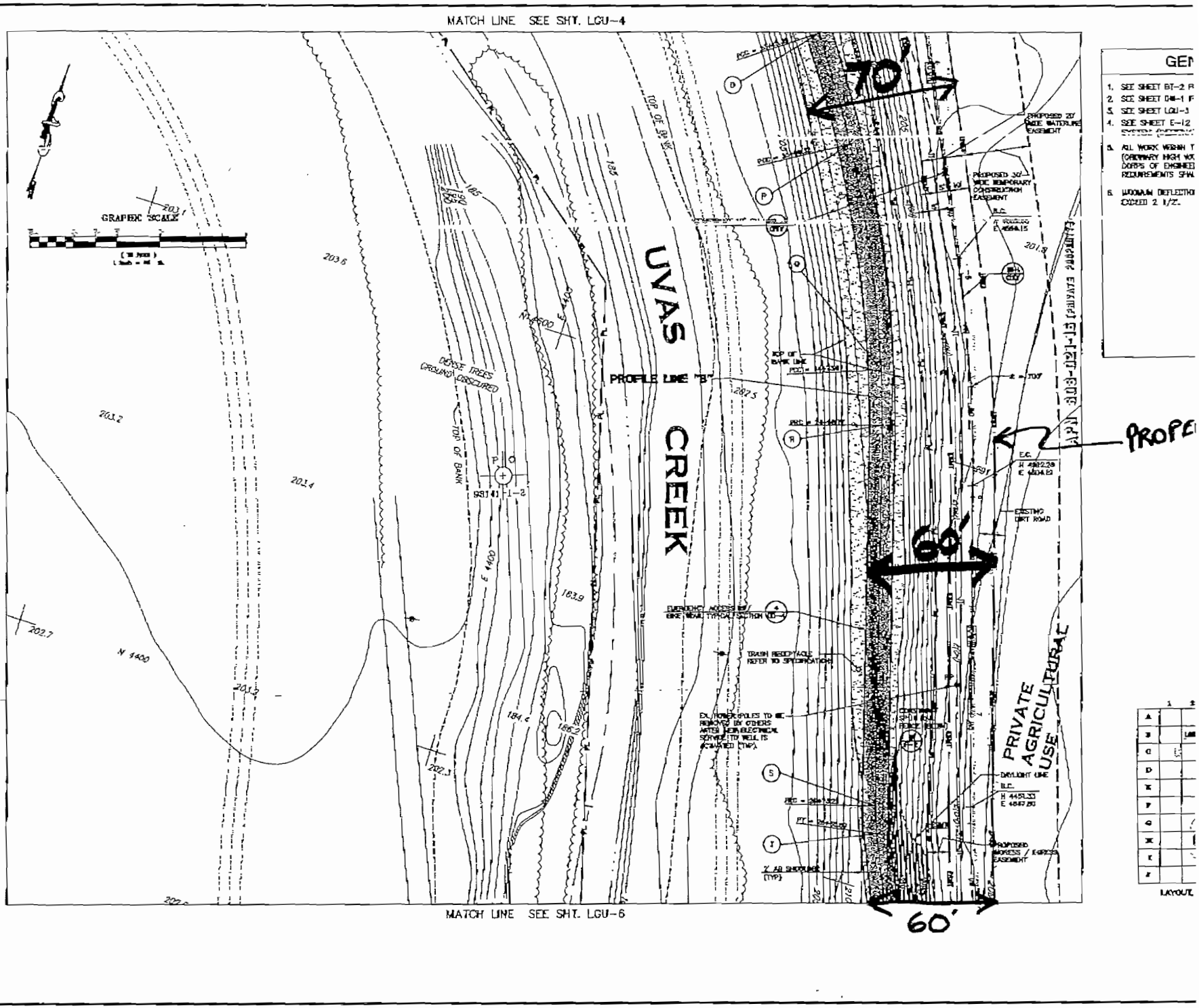

GENERAL NOTES
1. SEE SHEETS BT-1, BT-2 AND BT-3 FOR PROFILES OF BIKE PATH.
2. SEE SHEET DW-1 FOR DOMESTIC WATER PROFILE.
3. SEE SHEET LGU-3 FOR BIKE PATH HORIZONTAL CONTROL.
4. SEE SHEET E-11 FOR ELECTRICAL AND TELEPHONE SYSTEM (DESIGNATED AS "JT" ON THIS SHEET).
5. ALL WORK WITHIN THE CREEK CHANNEL BELOW ELEVATION (ORDINARY HIGH WATER) FALLS UNDER THE JURISDICTION OF THE CORPS OF ENGINEERS SECTION 404 PERMIT. ALL PERMIT REQUIREMENTS SHALL BE COMPLIED WITH FOR THIS WORK.
6. MAXIMUM DEFLECTION AT WATER PIPE JOINT SHALL NOT EXCEED 2 1/2°.
MATCH LINE SEE SHT. LGU-3
MATCH LINE SEE SHT. LGU-5
PROFILE LINE "C"
PROFILE LINE "D"
SEE DWG BT-4
UCHESSA AVE
UVAS CREEK
PROPERTY LINE
73'
GRAPHIC SCALE
DENSE TREES GROUND OBSCURED
CONFORM TO EXISTING TC AND FL ELEVATIONS
CITY OF GILROY
Harris & Associates
beals sport
EXPOSITION PARK SITE IMPROVEMENTS PHASE I AND I
LAYOUT, GRADING & UTILITY PLAN - GRID C4
LGU-4



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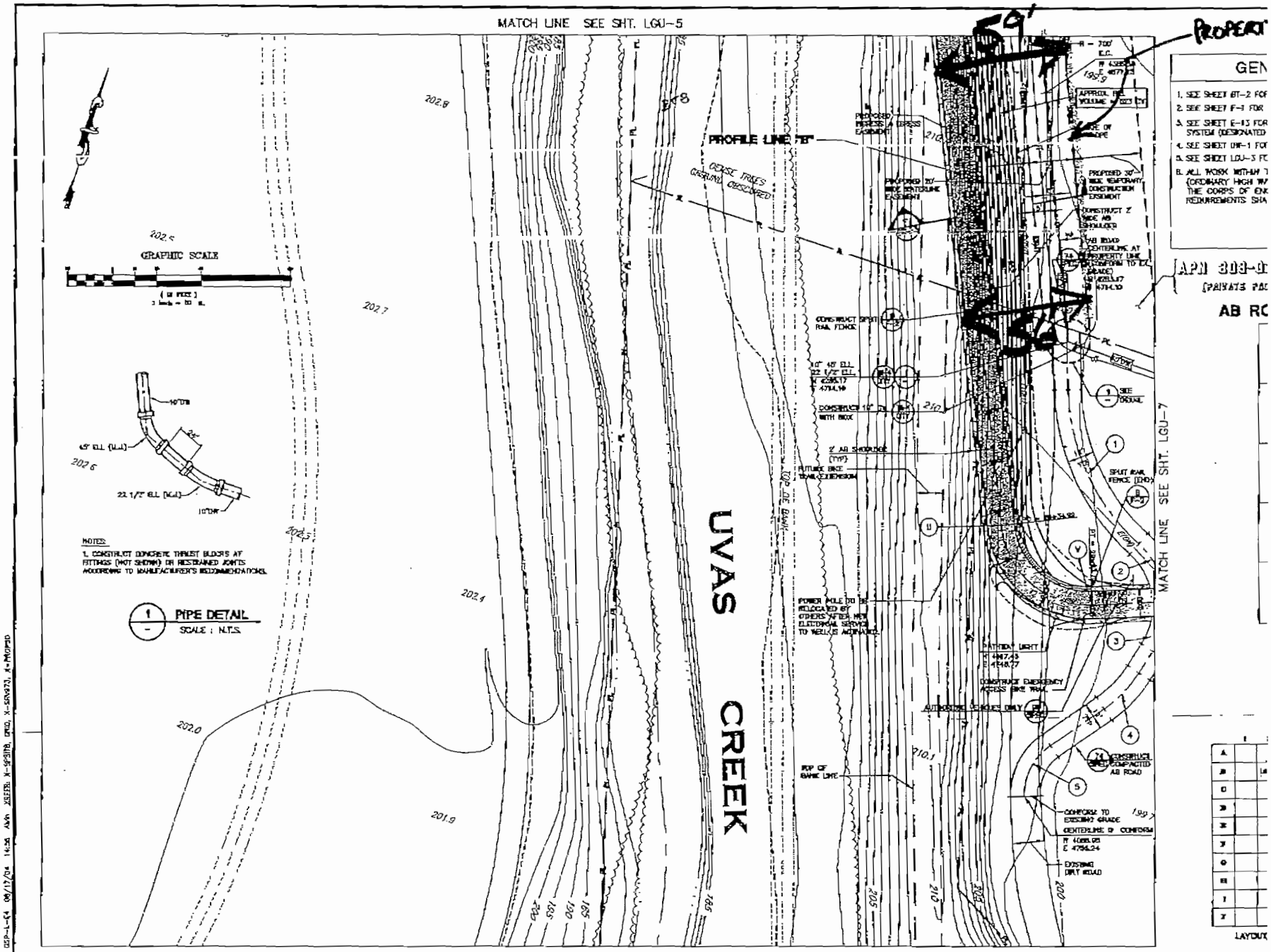

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LETTER 3 - Response to the letter from Giacalone-McDermott Management Company (October 3, 2005)

1. The comment suggests the addition of more background information, specifically a recounting of prior actions regarding a USA amendment for the project site. Because the background information suggested is pertinent to the proposed project, the information has been added to the SEIR. Refer to Section 4.0 Changes to the Draft EIR.

2. The comment suggests the addition of information related to analysis of project consistency with LAFCO Urban Service Area Amendment Policy 3. Because some of the information suggested is pertinent to analysis of proposed project consistency with the policy, that information has been added to the SEIR. Refer to Section 4.0 Changes to the Draft EIR.

3. The comment brings up the addition of three additional criteria that were added to LAFCO Urban Service Area Amendment Policy 3 on January 1, 2003, but not considered in the SEIR. The three additional criteria, and analysis of those criteria, have been added to the SEIR. Refer to Section 4.0 Changes to the Draft EIR.

4. The comment brings up the addition of new wording that was added to LAFCO Urban Service Area Amendment Policy 4 (now Policy 5) on January 1, 2003, but not considered in the SEIR. The comment also suggests additional analysis of the project's consistency with the policy. The new policy wording has been added to the SEIR, and the analysis updated. Refer to Section 4.0 Changes to the Draft EIR. The analysis in the Draft EIR updated the information in the vacant land analysis, since the Glen Loma Specific Plan was approved by the City following completion of the vacant land analysis.

5. The comment addresses the conditions at the alternative location (Alternative #2), in particular, access and utilities. The comment offers an alternative perspective on comparison of the alternatives.

Although access is not currently available from Wren Avenue or Church Street, and although it is true that other undeveloped properties are located between these two streets and the alternative location, it is not unreasonable to expect that one or both of these two streets could provide additional access within the next five years (the purpose of the Urban Service Area being to provide a five-year supply of developable land). In the mean time, there is access from Monterey Street and Vickery Avenue.

It is acknowledged that the project site has services nearby. The residences to the north, visitor serving uses to the east, and the future sports park are, or soon will be, served by the City of Gilroy. However, the proposed project would result in an increase in planned services, whereas the City already has plans to provide services at the alternate location. For analysis of an urban services area amendment, when service connections are relatively convenient at both locations, the effect of the proposed project on overall services demand is an important factor.

6. The threshold for disturbance of raptors is 300 feet. The trees along Uvas Creek are less than 300 feet from the project site.

7. The mitigation measure addresses control of non-native plants, not specifically the protection of on-site native plants. Milk thistle, an invasive non-native plant, was observed on the northwestern parcel during a site visit by the EMC Planning Group Inc. biologist.

8. No comment is made on these impacts or mitigation measures.

9. Assuming that the commercial uses would be located within 110 feet of the centerline of Luchessa Avenue or 225 feet of the centerline of Monterey Street, noise levels would exceed City standards based on the noise contours developed for the noise study. While windows with sufficient STC ratings would be an acceptable approach to reducing interior noise levels, a noise evaluation would be needed to determine the appropriate noise rating for the windows.

The second paragraph of Mitigation Measure 10 belongs in the preceding impact statement. This change to the text has been made. Refer to Section 4.0 Changes to the Draft EIR.

10. The City would be able to assist with determining the existing easements or other arrangements pertinent to the existing (and any future) sound wall along Luchessa Avenue.

11. No comment is made on these impacts or mitigation measures.

12. The comment is acknowledged. If the required improvements are included in the City's fee program, the developer would be credited, or the improvements would be constructed by the City, depending on the specific needs and circumstances.

13. Refer to the response to Comment 12.

14. The comment is acknowledged. Page 2-3 of the Draft EIR states that two portions of the project site are not used for agriculture. The Draft EIR has been revised to reflect that the loss of farmland is on a portion of the project site rather than the entire project site. Refer to Section 4.0 Changes to the Draft EIR.

15. Refer to the response to Comment 12.

State of California – The Resources Agency ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF FISH AND GAME
http://www.dfg.ca.gov
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

October 6, 2005

RECEIVED
OCT 11 2005
Gilroy Planning Div.

Ms. Cydney Casper
City of Gilroy
7351 Rosana Street
Gilroy, CA 95020

Dear Ms. Casper:

Barberi (USA 04-02)
Gilroy, Santa Clara County
SCH 1998102079

The Department of Fish and Game (DFG) has reviewed the document for the subject project. We do not have specific comments regarding the proposed project and its effects on biological resources. Please be advised this project may result in changes to fish and wildlife resources as described in the California Code of Regulations, Title 14, Section 753.5(d)(1)(A)-(G)[1]. Therefore, if you are preparing an Environmental Impact Report or an Initial Study and Negative Declaration for this project, a de minimis determination is not appropriate, and an environmental filing fee as required under Fish and Game Code Section 711.4(d) should be paid to the Santa Clara County Clerk on or before filing of the Notice of Determination for this project.

If you have any questions, please contact Mr. Dave Johnston, Environmental Scientist, at (831) 475-9065; or Mr. Scott Wilson, Habitat Conservation Supervisor, at (707) 944-5584.

Sincerely,

Robert W. Floerke
Regional Manager
Central Coast Region

cc: State Clearinghouse

[1] http://ccr.oal.ca.gov/. Find California Code of Regulations, Title 14 Natural Resources, Division 1, Section 753

LETTER 4 - Response to the letter from the California Department of Fish and Game (October 6, 2005)

1. Comment noted. A de minimis statement is not appropriate for this project. However, this fee was likely already paid in association with earlier environmental review conducted by the City for the project site and proposed project.

Santa Clara Valley Water District

5750 ALMADEN EXPWY
SAN JOSE, CA 95118-3686
TELEPHONE (408) 265-2600
FACSIMILE (408) 266-0271
www.valleywater.org
AN EQUAL OPPORTUNITY EMPLOYER

File: 30115
Uvas Carnadero Creek

October 11, 2005

Ms. Cydney Casper, Planner II
Community Development Department
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

Subject: Barberi Urban Service Area Amendment—City of Gilroy File USA-04-02

Dear Ms. Casper:

The Santa Clara Valley Water District (District) has reviewed the Draft Subsequent Environmental Impact Report (DSEIR) for the subject project, received on August 29, 2005. The District has the following comments on the DSEIR:

1. **Page 2-55, Mitigation Measure 17 a.**

This mitigation measure includes a requirement for a new connection to the Uvas Creek trail. Any modifications to the Uvas Creek trail will need to be approved by the District and the United States Army Corps of Engineers Emergency Branch. Future trail connections will need to part of the City of Gilroy's (City) trail and covered under a joint use agreement between the City and the District. The District will not allow a private trail improvement within its right of way.

2. **Page 2-61, Hydrology and Water Quality**

Mitigation Measure 20 mitigates for potential adverse impacts to the Federal Emergency Management Agency's (FEMA) existing 100-year flood plain and the District's flowage easement by requiring a hydrological study for development within those areas. The text should also include the following language from the District' flowage easement: "Said easement area shall be kept clear of any type of building or structures for human habitation, and no other structures shall be constructed or maintained except as may be approved by the District, and no excavation shall be conducted and no landfill placed on the land without such approval as to the location and method of excavation and/or placement of landfill." The District also has a flowage easement policy which it follows when reviewing proposed construction within the flowage easements.

3. FEMA shows the project site is within an area protected from the 100-year flood by the Uvas Creek levee system. The District will recommend that a minimum 25-foot building setback be implemented adjacent to the levee. The setback should be measured from the outside toe of the levee structure. This setback allows for future emergency access to the levee and opportunities for additional levee improvements to be made while minimizing the potential to affect the adjacent developed area.

4. Mitigation Measure 21 addresses adverse impacts to existing flooding conditions in Uvas Creek by requiring the post-development storm runoff rates to be equal or less than existing storm runoff rates. The frequency of runoff events that must be mitigated should be addressed. The District recommends that, in addition to the 100-year and more frequent events such as the 10-year, the project maintain pre-development runoff rates during the most frequent events such as a 1-year, 2-year, etc. up to a 5-year to address induced erosion in Uvas Creek due to development. It has been shown that the increased runoff due to development during the most frequent storm events is a major factor in erosion of downstream creeks.

5. The DSEIR should address post-construction water quality mitigation. Mitigation Measure 22 indicates that source reduction BMPs will be implemented and, if necessary, treatment practices will be implemented. The text discussion on Page 2-62 addresses urban contaminants and the possible necessity of siltation ponds and contamination filters to mitigate for non-point source pollution. Mitigation measures should be incorporated that will require any future development proposals to implement post-construction water quality mitigation measures to the maximum extent practical.

The District appreciates the opportunity to review the DSEIR and looks forward to reviewing the Final Supplemental Environmental Impact Report. Please reference District File No. 30115 on future correspondence regarding this project. I may be reached at (408) 265-2607, extension 2319.

Sincerely,

Yvonne Arroyo

Yvonne Arroyo
Associate Engineer
Community Projects Review Unit
cc: S. Tippets, Y. Arroyo, M. Klemencic, File (2)

LETTER 5 - Response to the letter from Santa Clara Valley Water District, (October 11, 2005) (District File Number 2319)

1. As stated, all connections and or modifications to the Uvas Creek trail will be subject to approval by the Santa Clara Valley Water District and the U.S. Army Corps of Engineers, and will require a change to the joint use agreement for the trail. This requirement has been incorporated into Mitigation Measure 17 and the mitigation monitoring program. Refer to Section 4.0 Changes to the Draft EIR.

2. The suggested language has been added to Mitigation Measure 20. Refer to Section 4.0 Changes to the Draft EIR.

3. Comment noted. Per page 2-62, paragraph two of the Draft EIR all construction within 50 feet of the Uvas Creek levee will require a permit from and will be reviewed by the Santa Clara Valley Water District.

4. Comment noted. Per Mitigation Measure 21, the applicant must prepare a storm drainage improvement plan which will require approval by the City of Gilroy and the Santa Clara Valley Water District. Mitigation Measure 21 has been revised to require that drainage improvement plans address future runoff rates for the project, at the 1-year, 5-year, and 10-year and 100-year storm events. Refer to Section 4.0 Changes to the Draft EIR.

5. Comment noted. Per Mitigation Measure 22, a Notice of Intent and detailed engineering plans must be submitted for review by the Central Coast RWQCB. Mitigation Measure 22 has been revised to require that engineering designs address feasible post construction water quality measures such as siltation ponds and filters. Refer to Section 4.0 Changes to the Draft EIR.

DEPARTMENT OF TRANSPORTATION
P. O. BOX 23660
OAKLAND, CA 94623-0660
(510) 286-5505
(800) 735-2929 TTY

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Gilroy Planning Div.

Flex your power!
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October 11, 2005

SCL-101-R5.26
SCL101599
SCH1998102079

Ms. Cydney Casper
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

Dear Ms. Casper:

Barberi Urban Service Area (USA) – Draft Subsequent Environmental Impact Report (DSEIR)

Thank you for including the California Department of Transportation (Department) in the environmental review process for the proposed project. We have reviewed the DSEIR for the proposed project and have the following comments to offer.

Forecasting

The Department applies the Highway Capacity Manual (HCM) 2000 methodology to determine Level of Service (LOS) of all State facilities, including State freeways and highways. This document uses a higher traffic threshold for LOS D, E and F that has been adopted by the Valley Transportation Authority (VTA) which will result in a reduction of the required traffic mitigation measures. No justification was supplied for using the higher threshold for LOS D, E and F. The threshold should be revised for these LOS to conform to HCM 2000.

Density Range (pc/mi/ln)

LOS	HCM 2000	Table 3 (VTA's Guidelines)
D	26 – 35	26 - 46
E	35 – 45	46 -58
F	> 45	> 58

Should you require further information or have any questions regarding this letter, please call José L. Olveda of my staff at (510) 286-5535.

Sincerely,

Lisa Carboni

for TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Scott Morgan, State Clearinghouse

LETTER 6 - Response to the letter from the California Department of Transportation (October 11, 2005).

1. Comment noted. The traffic report for the proposed project utilized the LOS thresholds established by the VTA, which is the local Congestion Management Agency (CMA). The VTA acknowledges the difference between the 2000 Highway Capacity Manual (HCM) thresholds and the ones used for most traffic analyses in Santa Clara County. The VTA thresholds were derived from the HCM values and modified to reflect local conditions.

Although the threshold ranges in the Highway Capacity Manual and the guidelines adopted by the Valley Transportation Authority do vary, in this particular case, the LOS is the same regardless of which threshold is used. Given the project conditions traffic densities identified in Table 9 of the Traffic Impact Analysis, the level of service on State highways would be the same regardless of which set of thresholds is used.

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3.0 Revised Summary

Following is a revised version of the summary from the Draft EIR. Additions to the text are shown with underlines and deletions are shown with ~~strikethroughs~~. Also refer to Section 4.0 Changes to the Draft EIR for other changes to the Draft EIR.

CEQA Guidelines section 15123 requires that an EIR contain a brief summary of the proposed project and its consequences. The summary must identify each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect; areas of controversy known to the lead agency; and issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

Summary of Proposed Project

Location

The project site is located immediately south of the City of Gilroy in an unincorporated portion of Santa Clara County, approximately 35 miles south of San Jose, 10 miles south of Morgan Hill and 30 miles northeast of Salinas. The project site consists of four parcels located south of Luchessa Avenue, west of Monterey Road, north of the City's planned and partially constructed sports park, and east of Uvas Creek, in Santa Clara County adjacent to the Gilroy city limits. The project site is located on Assessor's parcel numbers (APNs) 808-21-008, 808-21-009, 808-21-016 and 808 21-018.

Background

The project site was part of proposed Urban Service Area (USA) Amendment 98-03, which also included the sports park site and six commercial parcels to the south. In conjunction with that amendment proposal, two environmental impact reports were prepared.

Project Description

The probable development scenario used for evaluation in this EIR includes 18,000 square feet of commercial uses near Monterey Road, 220 small lot single-family residential units, and 30 apartments or condominiums on the remainder of the project site. No development applications have been submitted to date.

Areas of Known Controversy

Controversial issues associated with the USA amendment request and development of the project site are as follows: 1) premature conversion of prime farmland given the available land within the existing city limits for residential development, and 2) the long-term noise impacts along Luchessa Avenue.

Summary of Project Effects

The following section provides a summary of impacts and mitigation measures. Refer to Section 2.0 Environmental Setting, Impacts and Mitigation Measures, and Section 3.0 Related Environmental Issues, for the full text of mitigation measures.

Significant Impacts and Mitigation Measures

Air Quality

Potentially Significant Impact - Diesel Emissions. Sensitive receptors could be exposed to construction emissions, including diesel, during construction.

Summary of Mitigation - Diesel-powered engines on construction equipment shall be required to have particle trapping filters to reduce the amount of polluting emissions. Construction delivery trucks shall not idle for longer than two minutes. Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use. All equipment shall be properly tuned and maintained in accordance with the manufacturer's specifications.

Potentially Significant Impact - Construction Dust Emissions. Sensitive receptors could be exposed to dust (PM_{10}) from grading operations and other soil disturbance during construction.

Summary of Mitigation - The following dust control measures shall be incorporated into all permits for the proposed project: Water all active construction areas at least twice daily; 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; replant vegetation in disturbed areas as quickly as possible; install wheel washers for all exiting trucks or wash off tires or tracks of all trucks and equipment leaving the site.

Biological Resources

Potentially Significant Impact - Raptor Nests. Cottonwood and sycamore trees present near the project site have the potential to provide suitable nesting habitat for raptors. If

there were active nest(s) of protected bird species present, construction and site preparation activities, if conducted during the nesting season, could result in the direct loss of nests, including eggs and young, or the abandonment of an active nest by the adults.

Summary of Mitigation - Pre-construction surveys for nesting raptors will be conducted by a qualified biologist if construction is to occur during the nesting season (April 15 – August 1) to reduce impacts to a less than significant level. Every effort will be made to avoid removal or impact to known raptor nests within project boundaries. If trees known to support raptor nests cannot be avoided, removal of these trees will only occur during the non-breeding season.

Potentially Significant Impact - Waters of the U.S. Uvas Creek is located approximately 50 feet from the western boundary of the project site. No other rivers, streams, or ponded areas that would be considered waters of the U.S. or wetlands are present on the project site. Disturbance to Uvas Creek is would be a potentially significant impact resulting from construction on the portions of the project site nearest to Uvas Creek.

Summary of Mitigation - Prior to future development activities, a 50-foot setback from the high water mark of Uvas Creek shall be established for the protection of the water corridor. Grading and equipment shall not be allowed within this setback. If disturbance is proposed within or above the creek bed, a Section 404 permit shall be obtained.

Potentially Significant Impact - Establishment of Non-native Plants. A number of invasive species listed on the California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* (CALEPC 1999) are present within the property boundaries, including milk thistle (*Silybum marianum*) and bull thistle (*Cirsium vulgare*). Grading and disturbance associated with the proposed project would remove any native plants currently growing at the project site and would also create the disturbed environment preferred by invasive species.

Summary of Mitigation - In order to prevent the spread of invasive non-native species, the project proponent shall prepare a landscaping and re-vegetation plan to include the following requirements: an eradication plan for plants listed in California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* currently growing on the project site; use of plants listed in California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* shall be prohibited; exposed soil areas shall be planted, mulched, or covered between October 15 and the following April 15 each year; plant materials used in landscaping, erosion control, or habitat restoration shall consist of plants that are included in an appropriate native California plants as identified by a qualified biologist or landscape architect; and to prevent erosion and conserve water, bare soil between newly installed plant materials shall be mulched, covered with jute netting, or seeded with a mix of seeds best suited for the climate and soil conditions, and native to the Gilroy region.

Noise

Potentially Significant Impact - Short-Term Construction Noise. Short-term noise could occur from construction activities at the project site. The temporary elevation of noise may pose a significant impact to nearby residents.

Summary of Mitigation - Prior to issuance of a grading permit, the following measures shall be incorporated into the project plans to mitigate construction noise: Construction shall be limited to weekdays between 7 AM and 7 PM and Saturdays and holidays between 9 AM and 7 PM, with no construction on Sundays or holidays; All internal combustion engine-driven equipment shall be equipped with mufflers that are in good condition and appropriate for the equipment; and Stationary noise-generating equipment shall be located as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.

Significant Impact - Noise Exposure at Proposed Residences in Excess of City Standards. Proposed residences on the project site along Monterey Street and Luchessa Avenue would experience noise levels that exceed the City's standards for residences.

Summary of Mitigation - When residential development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. If residential lots are proposed within 235 feet south of the Luchessa Avenue centerline (195 feet from the present property line), or within 470 feet of the centerline of Monterey Street, up to a nine-foot tall noise barrier may be required between the lots and Luchessa Avenue or Monterey Street.

Significant Impact - Noise Exposure at Proposed Commercial. Proposed commercial buildings, on the project site along Monterey Street and Luchessa Avenue, would experience exterior noise levels that exceed City's standards. Preliminary evaluation concludes that no commercial building doors or operable windows should be allowed within 110 feet south of the Luchessa Avenue centerline, or within 225 feet west of the of Monterey Street centerline, and no outdoor use should be allowed in these areas.

Summary of Mitigation - When commercial development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. ~~Preliminary evaluation concludes that no commercial building doors or operable windows should be allowed within 110 feet south of the Luchessa Avenue centerline, or within 225 feet west of the of Monterey Street centerline, and no outdoor use should be allowed in these areas.~~

Significant Impact - Noise Impact on Existing Residences North of Luchessa Avenue. Traffic generated by the proposed project would increase ambient noise levels along Luchessa Avenue by one to two decibels.

Summary of Mitigation - The developer shall review the existing barrier along Luchessa Avenue to determine if a three-foot high extension could be added. If this is not effective and/or feasible, a new, nine-foot high barrier shall be constructed in its place.

Significant Impact - Sports Park-generated Noise. Sports park noise at the southern boundary of the project site would exceed City standards for residential uses.

Summary of Mitigation - Prior to issuance of building permits for residences with yards within 175 feet of the sports park, the applicant shall demonstrate that noise levels at residential yards are in compliance with the standards of Gilroy General Plan Policy 26.02.

Potentially Significant Impact - Residential Interior Noise Levels. Traffic noise would result in interior noise levels in existing and proposed residences in excess of City standards.

Summary of Mitigation - Subject to the review and approval of the City of Gilroy Building Division, the applicant for any residential development on the project site shall conduct an acoustical study.

Traffic/Transportation

Potentially Significant Impact - Left turn Delays at Monterey Street/Tenth Street Intersection. This intersection would operate at an acceptable level of service during project conditions. However, the permitted phasing for the eastbound and westbound left-turn movements causes excessive delays for left-turning vehicles.

Summary of Mitigation- The developer of the first project on the project site shall install a full eight-phase signal operation at the Monterey Street/Tenth Street intersection, to provide protected left turns on the eastbound and westbound approaches and increase the capacity of the left-turn movement.

Potentially Significant Impact - Commercial Site Access. Access to the commercial site from Monterey Street could result in conflicts with other movements along Monterey Street.

Summary of Mitigation - Prior to Architectural and Site Review Approval for the commercial area or high-density residential uses along Monterey Street, a traffic study shall be performed to evaluate traffic flow and turning movements along Monterey Street and Luchessa Avenue.

Potentially Significant Impact - Pedestrian and Bicycle Circulation. Continuous sidewalks are not provided on the south side of Luchessa Avenue, restricting pedestrian access in and around the project site, and resulting in a potentially dangerous pedestrian environment.

Summary of Mitigation - The developer shall construct frontage improvements along Luchessa Avenue and Monterey Street concurrent with adjacent development on the project site. Site plans and tentative maps shall include the following bicycle and pedestrian connections: a connection to the Uvas Creek trail; a connection near the center of the project site to the Sports Park; and a connection between the commercial and residential areas. Modifications to the Uvas Creek trail will need to approved by the

Santa Clara Valley Water District and the United States Army Corps of Engineers Emergency Branch Division, and need to be addressed in a revised joint use agreement.

Cultural Resources

Potentially Significant Impact - Disturbance of Cultural Resources. It is possible that that construction of the proposed project could disturb unknown archaeological resources.

Summary of Mitigation - Standard City procedures will be followed to ensure unknown cultural resources are not disturbed; Native American tribes potentially affected by the proposed project will be informed. An archeological monitor will be present during ground-disturbing activities.

Hydrology and Water Quality

Potentially Significant Impact - Development in FEMA Flood Zone. About four acres at the eastern end of the project site are within the FEMA 100-year flood zone, and subject to less than one foot of inundation during a 100-foot storm. About one acre in the south central portion of the project site is within a flood flowage easement. Development could affect, or be affected by, flood water flows.

Summary of Mitigation – A hydrology report shall be prepared by a qualified hydrologist or engineer, for tentative maps or architectural and site reviews within the flood areas, to address issues of site drainage, storm water run-off quantity and quality, and on-site storm water flow, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to issuance of a grading permit. The easement area shall be kept clear of any type of buildings or structures for human habitation, and no other structures shall be constructed or maintained except as may be approved by the District, and no excavation shall be conducted and no landfill placed on the land without such approval as to the location and method of excavation and/or placement of landfill.

Potentially Significant Impact - Storm Water Runoff. Urban contaminants from the proposed project could be transported to the drainage system, polluting downstream water systems. The potential for contamination exists during both the construction and operation of the proposed project.

Summary of Mitigation - The applicant shall be required to prepare storm drainage improvement plans for each project phase, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to approval of the final map. The applicant shall, for each phase of the project, submit a Notice of Intent (NOI) and detailed engineering designs to the Central Coast RWQCB. The applicant shall be required to prepare a detailed report identifying storm water runoff at the 1-year, 5-year, 10-year, andf 1000-year storm events. Engineering designs shall address feasible post construction water quality measures such as siltation ponds and filters.

Significant Cumulative Effects

Significant Impact - Luchessa Avenue/Thomas Road Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during both peak hours.

Significant Impact - Luchessa Avenue/Princevalle Street Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during both peak periods.

Significant Impact - Monterey Street/Luchessa Avenue Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during the PM peak hour.

Significant Impact - Monterey Street/Tenth Street Intersection. Under cumulative conditions, this intersection would operate at unacceptable level of service (LOS E-) during the PM peak hour.

Summary of Mitigation - If the following improvements, or equivalent as determined by the Gilroy Engineering Division, are not included in the City's traffic fee program at the time traffic impact fees are paid, the developer shall pay a pro-rata share of the cost of each improvement not included in the fee program in addition to standard traffic impact fees: Luchessa Avenue and Thomas Road: a traffic signal or traffic circle; Luchessa Avenue and Princevalle Street: a traffic signal; Monterey Street and Luchessa Avenue: an additional northbound left-turn lane and widening of the west leg to provide two receiving lanes for the northbound left-turning vehicles; Monterey Street and Tenth Street: a second southbound left-turn lane, a westbound overlap phase, one left-turn lane, two through lanes, and one separate right-turn lane on northbound Monterey Street. The project that triggers unacceptable levels of service at these locations will be required to design and construct the improvements and submit their costs to the City for reimbursement our of the traffic impact fee program funds.

Significant Unavoidable Impacts

Air Quality

Significant and Unavoidable - The proposed project would contribute to significant unavoidable cumulative air quality impacts.

Summary of Mitigation - Standard mitigation measures, presented above would not reduce the impact to a less than significant level.

Agricultural Resources

Significant and Unavoidable Impact - Loss of Prime Agricultural Land. The proposed project would result in the loss of ~~27.7~~ 26.0 acres of prime farmland that has a LESA score that indicates agricultural land of significant value.

Summary of Mitigation - Implementation of the City's Agricultural Mitigation Policy would be required. However, the impact would still be considered significant and unavoidable.

Noise/Aesthetic

Significant and Unavoidable Visual Impact - Construction of a noise barrier greater than seven feet in height would be considered a significant visual impact, in accordance with the City of Gilroy thresholds of significance for aesthetics.

Summary of Alternatives

Alternative 1 – No Project Alternative

The "no project" alternative occurs if the City or Santa Clara County LAFCO denies the request for a USA amendment for the project site. In this circumstance, no development would take place on the project site and the project site would remain within unincorporated Santa Clara County as primarily agricultural land.

Alternative 2 – Alternate Location

The "alternate location" is along the west side of Monterey Street near Cohansey Avenue. The alternate location is comprised of six parcels with a total of 34.7 acres. The alternate location is within the Gilroy USA and city limits. Most of the alternate location is designated Neighborhood District in the general plan.

Alternative 3 – Additional Commercial Alternative

The "reduced residential/additional commercial" alternative would decrease the number of single-family residences and increase the amount of commercial uses. The commercial area would be increased to about 38,000 square feet, on about three acres, and would be expanded westward along Luchessa Avenue to the intersection with Hyde Park Street.

Comparison of Alternatives

The "no project" alternative would be the superior alternative, because by keeping the project site in its current agricultural uses there would be no significant environmental impacts. The second environmentally superior alternative would be the "alternate location" alternative because the loss of prime farmland would be avoided.

TABLE S-1

Summary of Impacts and Mitigation Measures

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
Agriculture	Prime Farmland	Significant and Unavoidable	1. The applicant shall negotiate with the City of Gilroy to identify one of the following mitigation measures to reduce the impact to agricultural resources: a. Purchase an equal amount of land (1:1 ratio) of agricultural land within the "Preferred Areas" and the transfer of ownership of this land to the Open Space Authority or other City-approved agency. b. Purchase of development rights to a 1:1 ratio on agricultural land within the "Preferred Areas" and the transfer of ownership of these rights to the Open Space Authority or other City-approved agency. The purchase value of this agricultural conservation easement will be based upon the appraisal of purchasing development rights and not fee-title rights. c. Payment of an in-lieu fee will be based upon the lowest appraisal of purchasing development rights in the "Preferred Areas."	Significant and Unavoidable
Air Quality	Construction Emissions	Significant	2. During construction all diesel-powered engines shall be required to have particle trapping filters to reduce the amount of polluting emissions. Construction delivery trucks shall not idle for longer than two minutes. 3. The following measures shall be incorporated into all project plans, subject to the review and approval of the City of Gilroy Engineering Division:	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
			a. The idling time for construction equipment shall not exceed two minutes; b. Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use; c. All equipment shall be properly tuned and maintained in accordance with the manufacturer's specifications; d. When feasible, alternative fueled or electrical construction equipment shall be used at the project site; e. Use the minimum practical engine size for construction equipment; and f. Gasoline-powered equipment shall be equipped with catalytic converters, where feasible.	
Air Quality	Construction Dust	Significant	4. The following dust control measures shall be incorporated into all permits for the proposed project, subject to the review and approval of the City of Gilroy Engineering Division: a. Water all active construction areas at least twice daily; b. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard; c. 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; d. Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites; e. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets;	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
			f. Enclose, cover and water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand); g. Limit traffic speeds on unpaved roads to 15 mph; h. Install sandbags or other erosion control measures to prevent silt runoff to public roadways; i. Replant vegetation in disturbed areas as quickly as possible; and j. Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.	
Biology	Raptor Nests	Potentially Significant	5. Pre-construction surveys for nesting raptors shall be conducted by a qualified biologist if construction is to occur during the nesting season (April 15 – August 1) to reduce impacts to a less than significant level. If raptor nests are located during pre-construction surveys, a qualified biologist shall establish a 300-foot buffer around each nest for the duration of the breeding season (until such time as the young are fully fledged) to prevent nest harassment and brood mortality. Work may proceed prior to August 1 only if a qualified biologist conducts nest checks and establishes that the young are fully fledged. Every effort will be made to avoid removal or impact to known raptor nests within project boundaries. If trees known to support raptor nests cannot be avoided, removal of these trees will only occur during the non-breeding season to reduce impacts to a less than significant level.	Less than Significant
Biology	Waters of the U.S.	Potentially Significant	6. Prior to future development activities, a 50-foot setback from the high water mark of Uvas Creek shall be established for the protection of the water corridor. Although a majority of this corridor is likely to occur on the property owned by the Santa Clara Valley Water District, a portion of the setback may occur on the project site. Grading and equipment shall not be allowed within this setback. If	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
			disturbance is proposed within or above the creekbed, a Section 404 permit from the USACE and a Streambed Alteration Agreement from CDFG shall be obtained.	
Biology	Establishment of Non-Native Plants	Potentially Significant	7. In order to prevent the spread of invasive non-native species, the project proponent shall prepare a landscaping and re-vegetation plan to include the following requirements: a. An eradication plan for plants listed in California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* currently growing on the project site; b. Use of plants listed in California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* shall be prohibited; c. Exposed soil areas shall be planted, mulched, or covered between October 15 and the following April 15 each year; d. Plant materials used in landscaping, erosion control, or habitat restoration shall consist of plants that are included in an appropriate native California plants as identified by a qualified biologist or landscape architect; and e. To prevent erosion and conserve water, bare soil between newly installed plant materials shall be mulched, covered with jute netting, or seeded with a mix of seeds best suited for the climate and soil conditions, and native to the Gilroy region.	Less than Significant
Noise	Construction Noise	Potentially Significant Impact	8. Prior to issuance of a grading permit, the following measures shall be incorporated into the project plans to mitigate construction noise, subject to the review and approval of the City of Gilroy Engineering and Building divisions: a. Construction shall be limited to weekdays between 7 AM and 7	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
			PM, and Saturdays between 9 AM and 7 PM, with no construction on Sundays or City holidays; b. All internal combustion engine-driven equipment shall be equipped with mufflers that are in good condition and appropriate for the equipment; and c. Stationary noise-generating equipment shall be located as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.	
Noise	Residential Noise Impacts	Significant	9. Associated with project-level environmental review when residential development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. The study shall include descriptions of the exterior and interior noise exposures under existing and future conditions and the mitigation measures necessary to achieve compliance with the City of Gilroy Noise Element and the State of California Code of Regulations, Title 24 (as applied to multi-family housing). If residential lots are proposed within 235 feet south of the Luchessa Avenue centerline (195 feet from the present property line), or within 470 feet of the centerline of Monterey Street, up to a nine-foot tall noise barrier may be required between the lots and Luchessa Avenue or Monterey Street. The barrier shall be consistent with the policies of the general plan, and if feasible, shall be an earth berm. Specific mitigation measures identified in the project specific noise assessment shall be incorporated into the project design.	Less than Significant Note: Construction of a noise barrier greater than seven feet in height would be considered a significant visual impact, in accordance with the City of Gilroy thresholds of significance for aesthetics.

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
Noise	Noise Exposure at Proposed Commercial	Significant	10. Associated with project-level environmental review when commercial development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. The study shall include descriptions of the exterior and interior noise exposures under existing and future conditions and the mitigation measures necessary to achieve compliance with the City of Gilroy Noise Element. ~~Preliminary evaluation concludes that no commercial building doors or operable windows should be allowed within 110 feet south of the Luchessa Avenue centerline, or within 225 feet west of the of Monterey Street centerline, and no outdoor use should be allowed in these areas.~~ Specific mitigation measures identified in the project specific noise assessment shall be incorporated into the project design.	Less than Significant
Noise	Residences North of Luchessa Avenue	Significant	11. The developer shall review the existing barrier along Luchessa Avenue to determine if a three-foot high extension could be added. If this is not effective and/or feasible, a new, nine-foot high barrier shall be constructed in its place. The extension or new barrier shall be constructed prior to issuance of a grading permit for the project site, or when the City determines that noise exposure at this location exceeds city standards. The developer shall be responsible for the cost to study and construct the replacement wall or extension. The entire wall shall be textured and colored, and screened to the extent feasible with drought tolerant, low maintenance landscaping. Any new wall shall be constructed within existing non-access strips on private property, if existing, otherwise immediately adjacent to the property boundary on the public right-of-way.	Less than Significant Note: Construction of a noise barrier greater than seven feet in height would be considered a significant visual impact, in accordance

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
				with the City of Gilroy thresholds of significance for aesthetics.
Noise	Sports Park Generated Noise	Significant	12. Prior to issuance of building permits for residences with yards within 175 feet of the sports park, the applicant shall demonstrate that noise levels at residential yards are in compliance with the standards of Gilroy General Plan Policy 26.02. This may be accomplished by the construction of a six-foot sound barrier, however, such barrier shall not impinge on the SCVWD flood flowage easement recorded on the project site. A noise study shall be prepared, based on final improvement plans, to demonstrate that the residences are adequately protected from noise impacts.	Less than Significant
Noise	Residential Interior Noise Level	Potentially Significant	13. Subject to the review and approval of the City of Gilroy Building Division, the applicant for any residential development on the project site shall conduct an acoustical study and establish engineering requirements to be included in construction plans to maintain interior noise levels at no greater than 45 dBDNL. Approaches to noise reductions could include use of triple pane windows, ventilation systems with non-operable windows, or noise attenuating wall construction.	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
Traffic	Monterey Street/Tenth Street Intersection	Potentially Significant	14. The developer of the first project on the project site shall install a full eight-phase signal operation at the Monterey Street/Tenth Street intersection to provide protected left turns on the eastbound and westbound approaches and increase the capacity of the left-turn movement. The signal shall be installed prior to issuance of the first residential or commercial occupancy permit, subject to review and approval by the City Engineering Division.	Less than Significant
Traffic	Commercial Site Access	Potentially Significant	15. Prior to Architectural and Site Review Approval for the commercial area or high-density residential uses along Monterey Street, or other residential development if an access street is proposed to connect to Monterey Street, a traffic study and engineering design shall be performed to evaluate traffic flow and turning movements along Monterey Street and Luchessa Avenue, and determine suitability of driveway locations on Monterey Street and Luchessa Avenue. If necessary, full access may be provided by an internal street. Driveways along Monterey Street shall be limited to right turns in and out.	Less than Significant
Traffic	Circulation	Potentially Significant	16. The developer shall construct frontage improvements along Luchessa Avenue and Monterey Street concurrent with adjacent development on the project site. The pedestrian improvements shall be completed prior to the issuance of occupancy permits for the adjacent uses. The frontage improvements shall include construction of a half-street section including the eastbound lanes of Luchessa Avenue, the southbound lanes of Monterey Street, and adjacent sidewalks, curbs, gutters, and landscaping, and the re-striping of the pedestrian crosswalks serving the southwest corner of the Monterey Street and Luchessa Avenue intersection. 17. Site plans and tentative maps shall include the following bicycle	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
			and pedestrian connections: a. a connection to the Uvas Creek trail; Any modifications to the Uvas Creek trail will need to approved by the Santa Clara Valley Water District and the United States Army Corps of Engineers Emergency Branch Division. Future trail connections will need to be addressed in a revised joint use agreement; b. a connection near the center of the project site to the Sports Park; and c. a connection between the commercial and residential areas (this connection would be satisfied if an internal street with sidewalk were provided).	
Cultural Resources	Disturbance of Cultural Resources	Potentially Significant	18. Due to the possibility that significant buried cultural resources might be found during construction the following language shall be included in any permits issued for the project site, including, but not limited to building permits for future development, subject to the review and approval of the Gilroy Planning Division: If archaeological resources or human remains are discovered during construction, work shall be halted at a minimum of 200 feet from the find and the area shall be staked off. The project developer shall notify a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented. 19. In the event of an accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall ensure that this language is included in all permits in accordance with CEQA Guidelines section 15064.5(e): If human remains are found during construction there shall be no	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
			further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Gilroy Police Department contacts the coroner of Santa Clara County to determine that no investigation of the cause of death is required. If the coroner determines the remains to be Native American the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent (MLD) from the deceased Native American. The MLD may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code Section 5097.98. The landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if: a) the Native American Heritage Commission is unable to identify a MLD or the MLD failed to make a recommendation within 24 hours after being notified by the commission; b) the descendent identified fails to make a recommendation; or c) the landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.	

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
Hydrology/ Water Quality	FEMA Flood Zone	Potentially Significant	20. Prior to approval of a tentative map or architectural and site review for the area located within the flood zone, the applicant shall submit a hydrology report, prepared for the project by a qualified hydrologist or engineer, to address issues of site drainage, storm water run-off quantity and quality, and on-site storm water flow, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to issuance of a grading permit. All grading, design or other recommendations of this report shall be incorporated into project plans. The easement area shall be kept clear of any type of buildings or structures for human habitation, and no other structures shall be constructed or maintained except as may be approved by the District, and no excavation shall be conducted and no landfill placed on the land without such approval as to the location and method of excavation and/or placement of landfill.	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
Hydrology/ Water Quality	Storm Water Runoff and Quality	Potentially Significant	21. The applicant shall be required to prepare storm drainage improvement plans for each project phase, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to approval of the final map. The storm drainage improvement plan shall be designed to maintain post-development run-off rates at or below existing run-off rates for the 1-year, 5-year, 10-year, and 100-year storm events. 22. The applicant shall, for each phase of the project, submit a Notice of Intent (NOI) and detailed engineering designs to the Central Coast RWQCB. This permit shall require development and implementation of a SWPPP that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site. The SWPPP must include Best Management Practices that address source reduction and, if necessary, shall include practices that require treatment. The SWPPP shall be submitted to the City of Gilroy Engineering Division for review and approval prior to approval of a grading permit for each phase of the project. Engineering designs shall address feasible post-construction water quality measures such as siltation ponds and filters. 23. For projects located within 50 feet of Uvas Creek, the applicant shall submit plans for review by, and obtain an approved permit from the Santa Clara Valley Water District (SCVWD) prior to approval of a grading permit.	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
Cumulative Traffic	Luchessa Avenue Thomas Road Intersection Luchessa Avenue Princevalle Street Intersection Monterey Street Luchessa Avenue Intersection Monterey Street Tenth Street Intersection	Potentially Significant	24. If the following improvements, or equivalent as determined by the Gilroy Engineering Division, are not included in the City's traffic fee program at the time traffic impact fees are paid, the developer shall pay a pro-rata share of the cost of each improvement not included in the fee program in addition to standard traffic impact fees. 1. Luchessa Avenue and Thomas Road: a traffic signal or traffic circle; 2. Luchessa Avenue and Princevalle Street: a traffic signal; 3. Monterey Street and Luchessa Avenue: an additional northbound left-turn lane and widening of the west leg to provide two receiving lanes for the northbound left-turning vehicles; 4. Monterey Street and Tenth Street: a second southbound left-turn lane, a westbound overlap phase, one left-turn lane, two through lanes, and one separate right-turn lane on northbound Monterey Street.	Less than Significant

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4.0 Changes to the Draft EIR

This section contains text, tables and graphics from the Draft EIR with changes indicated. Additions to the text are shown with underlines and deletions are shown with ~~strikethroughs~~. Also refer to Section 3.0 Revised Summary for an updated summary.

1.2 Project Location and Setting

The following revisions are made to page 1-15:

Background

The project site was part of proposed USA Amendment 98-03, which also included the sports park site and six commercial parcels to the south. In conjunction with that amendment proposal, two environmental impact reports were prepared.

In February 1999 the *Gilroy Sports Park and Urban Service Area Amendment (USA 98-03) EIR* ("USA Amendment EIR") was prepared based on the land uses in the old Gilroy general plan. Because the City was in the process of updating its general plan at the time, LAFCO required further study to analyze the USA Amendment under the proposed land uses of the then-draft general plan update. The project site was analyzed under an Open Space land use designation in that EIR.

In April 2000 the *Gilroy Urban Service Area Amendment 98-03 Subsequent EIR* ("USA Amendment SEIR") was prepared. The project site was analyzed as Neighborhood District in that EIR, with a conceptual development plan for 147 residential units. ~~The conceptual development plan was in the City's Residential Development Ordinance permit allotment system at the time the EIR was prepared.~~

On March 18, 2002 the City certified the USA Amendment SEIR. ~~LAFCO did not approve amendment of the City's USA to include the adjacent sports park. The sports park is being constructed, but outside the City limits (consultant conversation with Cydney Casper, August 5, 2005).~~

Subsequently, the City approved the pre-zone of the three parcels comprising the sports park site to Public Facility on October 3, 2002. The USA Amendment SEIR and pre-zone information were forwarded to LAFCO to complete the USA application.

On October 9, 2002, LAFCO denied the City's USA amendment request for the sports park and project site. LAFCO indicated concerns regarding the lack of an adequate agricultural mitigation policy as described in the *Gilroy 2002-2020 General Plan EIR*. A

task force was in process of completing a formal Agricultural Mitigation Policy, which was adopted by the City Council on May 3, 2004.

1.4 Consistency with Local and Regional Plans

The following revisions are made to pages 1-18 and 1-19:

Urban Service Area Amendment Policy 3

LAFCO will consider factors such as the following to determine the local and regional impacts of a proposed Urban Service Area amendment:

a. The ratio of lands planned for residential use to land planned for employment-producing use;

b. The existence of adequate regional and local transportation capabilities to support the planned city growth;

c. Ability of the city to provide urban services to the growth areas without detracting from current service levels;

d. The ability of school districts to provide school facilities;

e. Whether the conversion of agricultural and other open space lands is premature, or if there are other areas into which to channel growth;

f. The role of special districts in providing services;

g. Environmental considerations, which may apply;

h. The impacts of proposed city expansion upon the County as a provider of services; ~~and~~

i. Fiscal impacts on other agencies~~.~~;

j. Regional housing needs;

k. Availability of adequate water supply; and

l. Consistency with city or county general plans and specific plans.

Discussion: Each of these factors is discussed below.

a. No specific development plans have been submitted but based on the preliminary discussions with the City, the applicant is considering development of 18,000 square feet of commercial uses nearest Monterey Road, 220 small lot single-family

residential units, and 30 apartments or condominiums on the remainder of the project site. This mix of land use is consistent with the Neighborhood District land use designation.

b. The proposed project would be served by U.S. Highway 101, Monterey Road, and other local streets. See Section 2.6, Transportation/Traffic, of this SEIR for additional discussion.

c. The City of Gilroy would extend water supply lines and sewer and storm drain lines to the project site. The City of Gilroy police and fire departments would provide public safety services to the project site. This extension of services would not reduce the level of service available to other areas of the city. See Section 2.7, Utilities and Service Systems, of this SEIR for additional discussion.

d. The proposed project would have an incremental impact on local schools. This impact would be offset by the payment of standard school impact fees. See Section 2.5, Public Services, of this SEIR for additional discussion.

e. The project site has been in the City of Gilroy 20-year planning area since 1979. The parcels north of the project site are within the city limits, and developed with houses. Parcels east of the project site, on the east side of Monterey Road from U.S. Highway 101 to Luchessa Avenue, are designated highway commercial, and developed with hotels and other visitor services. The land immediately south is the developing sports park, the first phase of which is currently under construction. The Uvas Creek bicycle trail is being extended along the eastern side of Uvas Creek, from its current terminus at Luchessa Avenue to the Sports Park. The project site will soon be adjacent to non-agricultural developed uses on its entire periphery (85 percent of its periphery if the Uvas Creek Trail is not counted). Land that is largely surrounded by urban land is generally less viable economically for agricultural use compared to lands that are in wholly agricultural areas (Crawford, Multari and Starr 1995). Because of encroaching development, the agricultural value of the farmland on the project site is expected to diminish. The project site is considered prime farmland and its loss is considered to be significant. See Section 2.2, Agricultural Resources, in this SEIR for further discussion.

f. If development occurs at the project site, the City of Gilroy would provide most direct services. There are no special districts expected to provide services to the project site.

g. The proposed amendment is subject to the analysis of this SEIR. The proposed project would result in the conversion of prime agricultural land to non-agricultural uses and significant cumulative air quality impacts. These impacts are considered significant and unavoidable impact, with development of the project site. Other potential impacts have been identified in this SEIR and mitigation measures are presented to reduce those impacts to a less than significant level.

h/i. According to Table 6 Santa Clara County Fiscal Impact of the *Fiscal Impact Analysis for the Barberi Urban Service Area Amendment*, the proposed project would cost the

County more than $14,000 in net service costs at the base year and $17,562 in ten years. The County is likely to provide library, health, and other services to the new residences. A fiscal analysis was prepared for the proposed project by Applied Development Economics in July 2005. The fiscal analysis is included in Appendix B.

j. The proposed project would provide housing at a variety of densities, as planned for the project site by the *Gilroy 2002-2020 General Plan* and the City's housing element. These units would contribute to the regional housing supply.

k. The City prepared the *City of Gilroy Water System Master Plan* and *City of Gilroy Urban Water Management Plan* in 2004 to guide development of the City's water supply system. The City of Gilroy relies on groundwater, pumped from wells throughout the City, for its water supply. Based on demand factors in the City of Gilroy Water System Master Plan, the proposed project would use .059 mgd of water. The City of Gilroy has an adequate supply of potable water available to meet the City's projected demands. Because the proposed project is consistent with the City's planned land uses and water demand projections, the City will have adequate water supplies to serve the proposed project.

l. The proposed residential and neighborhood-serving land uses are consistent with the *Gilroy 2002-2020 General Plan*. The general plan designates the project site for Neighborhood District, which is the land use proposed by the applicant.

The following revisions are made to pages 1-20 and 1-21:

Urban Service Area Amendment Policy 4

When a city with a substantial supply of vacant land within its Urban Service Area applies for an Urban Service Area expansion, LAFCO will require an explanation of why the expansion is necessary, why infill development is not undertaken first, and how an orderly, efficient growth pattern, consistent with LAFCO mandates, will be maintained.

Discussion. The City conducted a residential vacant land analysis in conjunction with the USA amendment application in January 2005. The vacant land analysis is included in Appendix C of this SEIR. The vacant land analysis concluded that the City's total residential supply (for all densities combined) was 11 years. The City had a 7.5-year supply of land designated as Neighborhood District (4.8 years within the proposed Glen Loma Specific Plan area and 2.7 years elsewhere within the urban service area). The Hecker Pass Specific Plan contains 1.5 years of residential land, mostly at lower densities. Elsewhere within the urban services area, the City has less than half a year each of low density, rural density, and hillside residential land. The Gilroy general plan directs the development of medium and high density, and a mix of other densities, within lands designated Neighborhood District. The City no longer designates lands under the medium and high-density designations outside the existing urban service area.

The applicant has indicated his intent to provide medium and high-density residential areas at the project site, which is designated Neighborhood District. The project site is adjacent to existing residential and visitor serving development on the north and east sides. A sports park is under construction on the south side, and a paved trail is under construction on the west side. The only side of the project site not substantially developed or developing is the west. Excluding the Uvas Creek Trail, about 85 percent of the project site boundary is adjacent to land that is either developed or under development. The City has recently made significant infrastructure improvements in Monterey Street to the east of the project site, including a recycled water line, median improvements, and gutters. Although it is not within the City's USA, the project site meets the physical description of an in-fill site.

2.1 Agricultural Resources

The following revisions are made to page 2-3:

Project Site Agricultural Use

The Santa Clara Valley has historically grown a variety of crops, including vegetables, fruits, nuts, grains, floral, and nursery crops. According to the *Gilroy USA Amendment 98-03 Subsequent EIR,* the land has been used primarily for cultivation of row crops. Two small portions of the project site are not used for agriculture: the northwest corner, which is an old home site, and the northeast corner, which ~~is~~ includes a propane sales facility and a house. About 1.7 acres of the project site is not used for agriculture, and about 26 acres is used for agriculture.

The following revisions are made to page 2-5:

Significant and Unavoidable Impact - Loss of Prime Agricultural Land. The proposed project would result in the loss of 26.0 ~~27.7~~ acres of prime farmland with a LESA score that indicates agricultural land of significant value. This would be a significant and unavoidable impact. Assessor's parcel numbers 808-21-008, 808-21-009, and 808-21-018 are not in agricultural use. Assessor's parcel number 808-21-016 is in agriculture use and is about 26 acres. Implementation of the City's Agricultural Mitigation Policy would be required.

2.4 Noise

The following revisions are made to page 2-39, Mitigation Measure 10:

Significant Impact – Noise Exposure at Proposed Commercial. Proposed commercial buildings, on the project site along Monterey Street and Luchessa Avenue, would experience exterior noise levels that exceed City's standards. Preliminary evaluation concludes that no commercial building doors or operable windows

should be allowed within 110 feet south of the Luchessa Avenue centerline, or within 225 feet west of the of Monterey Street centerline, and no outdoor use should be allowed in these areas. This would be a significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

10. Associated with project-level environmental review when commercial development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. The study shall include descriptions of the exterior and interior noise exposures under existing and future conditions and the mitigation measures necessary to achieve compliance with the City of Gilroy Noise Element.

~~Preliminary evaluation concludes that no commercial building doors or operable windows should be allowed within 110 feet south of the Luchessa Avenue centerline, or within 225 feet west of the of Monterey Street centerline, and no outdoor use should be allowed in these areas.~~

Specific mitigation measures identified in the project specific noise assessment shall be incorporated into the project design.

2.6 Transportation/Traffic

The following revisions are made to page 2-55, Mitigation Measure 17:

17. Site plans and tentative maps shall include the following bicycle and pedestrian connections:

    a. a connection to the Uvas Creek trail; Any modifications to the Uvas Creek trail will need to approved by the Santa Clara Valley Water District and the United States Army Corps of Engineers Emergency Branch Division. Future trail connections will need to be addressed in a revised joint use agreement.

2.8 Issues Adequately Addressed in the Initial Study or Prior CEQA Documents

The following revisions are made to page 2-63, Mitigation Measure 20:

20. Prior to approval of a tentative map or architectural and site review for the area located within the flood zone, the applicant shall submit a hydrology report, prepared for the project by a qualified hydrologist or engineer, to address issues of

site drainage, storm water run-off quantity and quality, and on-site storm water flow, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to issuance of a grading permit. All grading, design or other recommendations of this report shall be incorporated into project plans. The easement area shall be kept clear of any type of buildings or structures for human habitation, and no other structures shall be constructed or maintained except as may be approved by the District, and no excavation shall be conducted and no landfill placed on the land without such approval as to the location and method of excavation and/or placement of landfill.

The following revisions are made to page 2-65, Mitigation Measure 21:

21. The applicant shall be required to prepare storm drainage improvement plans for each project phase, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to approval of the final map. The storm drainage improvement plan shall be designed to maintain post-development run-off rates at or below existing run-off rates for the 1-year, 5-year, 10-year, and 100-year storm events.

The following revisions are made to page 2-65, Mitigation Measure 22:

22. The applicant shall, for each phase of the project, submit a Notice of Intent (NOI) and detailed engineering designs to the Central Coast RWQCB. This permit shall require development and implementation of a SWPPP that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site. The SWPPP must include Best Management Practices that address source reduction and, if necessary, shall include practices that require treatment. The SWPPP shall be submitted to the City of Gilroy Engineering Division for review and approval prior to approval of a grading permit for each phase of the project. Engineering designs shall address feasible post construction water quality measures such as siltation ponds and filters.

3.3 Unavoidable Significant Adverse Environmental Impacts

The following revisions are made to page 3-10:

Agricultural Resources

The proposed project would result in the loss of ~~27.7~~ 26.0 acres of prime farmland with a LESA score that indicates agricultural land of significant value. This would be a significant project and cumulative impact. Implementation of the City's Agricultural Mitigation Policy would be required, but would not reduce the impact to a less than significant level. A statement of overriding considerations would have to be adopted by the City of Gilroy if the proposed project is approved.

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5.0 Mitigation Monitoring Program

Introduction

CEQA Guidelines section 15097 requires public agencies to adopt reporting or monitoring programs when they approve projects subject to an environmental impact report or a negative declaration that includes mitigation measures to avoid significant adverse environmental effects. The reporting or monitoring program is to be designed to ensure compliance with conditions of project approval during project implementation in order to avoid significant adverse environmental effects.

The law was passed in response to historic non-implementation of mitigation measures presented in environmental documents and subsequently adopted as conditions of project approval. In addition, monitoring ensures that mitigation measures are implemented and thereby provides a mechanism to evaluate the effectiveness of the mitigation measures.

A definitive set of project conditions would include enough detailed information and enforcement procedures to ensure the measure's compliance. This monitoring program is designed to provide a mechanism to ensure that mitigation measures and subsequent conditions of project approval are implemented.

Monitoring Program

The basis for this monitoring program is the mitigation measures included in the project environmental impact report. These mitigation measures are designed to eliminate or reduce significant adverse environmental effects to less than significant levels. These mitigation measures become conditions of project approval, which the project proponent is required to complete during and after implementation of the proposed project.

The attached checklist is proposed for monitoring the implementation of the mitigation measures. This monitoring checklist contains all appropriate mitigation measures in the environmental impact report.

Monitoring Program Procedures

The City of Gilroy shall use the attached monitoring checklist for the Barberi Urban Service Amendment. The monitoring program should be implemented as follows:

1. The Gilroy Community Development Department should be responsible for coordination of the monitoring program, including the monitoring checklist. The Community Development Department should be responsible for completing the monitoring checklist and distributing the checklist to the responsible individuals or agencies for their use in monitoring the mitigation measures;

2. Each responsible individual or agency will then be responsible for determining whether the mitigation measures contained in the monitoring checklist have been complied with. Once all mitigation measures have been complied with, the responsible individual or agency should submit a copy of the monitoring checklist to the Community Development Department to be placed in the project file. If the mitigation measure has not been complied with, the monitoring checklist should not be returned to the Community Development Department;

3. The Gilroy Community Development Department will review the checklist to ensure that appropriate mitigation measures and additional conditions of project approval included in the monitoring checklist have been complied with at the appropriate time, e.g. prior to issuance of a use permit, etc. Compliance with mitigation measures is required for project approvals; and

4. If a responsible individual or agency determines that a non-compliance has occurred, a written notice should be delivered by certified mail to the project proponent within 10 days, with a copy to the Community Development Department, describing the non-compliance and requiring compliance within a specified period of time. If non-compliance still exists at the expiration of the specified period of time, construction may be halted and fines may be imposed at the discretion of the City of Gilroy.

Barberi Urban Service Area Amendment Mitigation Monitoring Checklist

Step 1

Prior to approval of **project entitlements** the following mitigation measure shall be implemented:

1. The applicant shall negotiate with the City of Gilroy to identify one of the following mitigation measures to reduce the impact to agricultural resources:

   a. Purchase an equal amount of land (1:1 ratio) of agricultural land within the "Preferred Areas" and the transfer of ownership of this land to the Open Space Authority or other City-approved agency.

   b. Purchase of development rights to a 1:1 ratio on agricultural land within the "Preferred Areas" and the transfer of ownership of these rights to the Open Space Authority or other City-approved agency. The purchase value of this agricultural conservation easement will be based upon the appraisal of purchasing development rights and not fee-title rights.

   c. Payment of an in-lieu fee will be based upon the lowest appraisal of purchasing development rights in the "Preferred Areas."

   Party responsible for implementation: *Applicant*

   Party responsible for monitoring: *Gilroy Planning Division*

9. Associated with project-level environmental review when residential development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. The study shall include descriptions of the exterior and interior noise exposures under existing and future conditions and the mitigation measures necessary to achieve compliance with the City of Gilroy Noise Element and the State of California Code of Regulations, Title 24 (as applied to multi-family housing).

   If residential lots are proposed within 235 feet south of the Luchessa Avenue centerline (195 feet from the present property line), or within 470 feet of the centerline of Monterey Street, up to a nine-foot tall noise barrier may be required between the lots and Luchessa Avenue or Monterey Street. The barrier shall be consistent with the policies of the general plan, and if feasible, shall be an earth berm.

   Party responsible for implementation: *Applicant*

   Party responsible for monitoring: *Gilroy Planning Division*

10. Associated with project-level environmental review when commercial development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. The study shall include descriptions of the exterior and interior noise exposures under existing and future conditions and the mitigation measures necessary to achieve compliance with the City of Gilroy Noise Element.

    Specific mitigation measures identified in the project specific noise assessment shall be incorporated into the project design.

    Party responsible for implementation: *Applicant*

    Party responsible for monitoring: *Gilroy Planning Division*

Step 2

Prior to **tentative map or architectural and site approval**, the following mitigation measures shall be implemented:

15. Prior to Architectural and Site Review Approval for the commercial area or high-density residential uses along Monterey Street, or other residential development if an access street is proposed to connect to Monterey Street, a traffic study and engineering design shall be performed to evaluate traffic flow and turning movements along Monterey Street and Luchessa Avenue, and determine suitability of driveway locations on Monterey Street and Luchessa Avenue. If necessary, full access may be provided by an internal street. Driveways along Monterey Street shall be limited to right turns in and out.

17. Site plans and tentative maps shall include the following bicycle and pedestrian connections:

    a. a connection to the Uvas Creek trail; Any modifications to the Uvas Creek trail will need to approved by the Santa Clara Valley Water District and the United States Army Corps of Engineers Emergency Branch Division. Future trail connections will need to be addressed in a revised joint use agreement;

    b. a connection near the center of the project site to the Sports Park; and

    c. a connection between the commercial and residential areas (this connection would be satisfied if an internal street with sidewalk were provided).

20. Prior to approval of a tentative map or architectural and site review for the area located within the flood zone, the applicant shall submit a hydrology report, prepared for the project by a qualified hydrologist or engineer, to address issues of site drainage, storm water run-off quantity and quality, and on-site storm water flow, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to issuance of a grading permit. All grading, design

or other recommendations of this report shall be incorporated into project plans. The easement area shall be kept clear of any type of buildings or structures for human habitation, and no other structures shall be constructed or maintained except except as may be approved by the District, and no excavation shall be conducted and no landfill placed on the land without such approval as to the location and method of excavation and/or placement of landfill.

21. The applicant shall be required to prepare storm drainage improvement plans for each project phase, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to approval of the final map. The storm drainage improvement plan shall be designed to maintain post-development run-off rates at or below existing run-off rates for the 1-year, 5-year, 10-year, and 100-year storm events.

22. The applicant shall, for each phase of the project, submit a Notice of Intent (NOI) and detailed engineering designs to the Central Coast RWQCB. This permit shall require development and implementation of a SWPPP that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site. The SWPPP must include Best Management Practices that address source reduction and, if necessary, shall include practices that require treatment. The SWPPP shall be submitted to the City of Gilroy Engineering Division for review and approval prior to approval of a grading permit for each phase of the project. Engineering designs shall address feasible post construction water quality measures such as siltation ponds and filters.

23. For projects located within 50 feet of Uvas Creek, the applicant shall submit plans for review by, and obtain an approved permit from the Santa Clara Valley Water District (SCVWD) prior to approval of a grading permit.

24. If the following improvements, or equivalent as determined by the Gilroy Engineering Division, are not included in the City's traffic fee program at the time traffic impact fees are paid, the developer shall pay a pro-rata share of the cost of each improvement not included in the fee program in addition to standard traffic impact fees. The project that triggers unacceptable levels of service at these locations will be required to design and construct the improvements and submit their costs to the City for reimbursement our of the traffic impact fee program funds.

    a. Luchessa Avenue and Thomas Road: a traffic signal or traffic circle;

    b. Luchessa Avenue and Princevalle Street: a traffic signal;

    c. Monterey Street and Luchessa Avenue: an additional northbound left-turn lane and widening of the west leg to provide two receiving lanes for the northbound left-turning vehicles; and

d. Monterey Street and Tenth Street: a second southbound left-turn lane, a westbound overlap phase, one left-turn lane, two through lanes, and one separate right-turn lane on northbound Monterey Street.

The development that triggers the improvements is responsible for the design and construction of the mitigation measure. If the improvements are traffic impact fee related, the developer will be reimbursed based on City procedures.

Step 3

Prior to approval and issuance of **grading or building permits**, the following mitigation measure shall be implemented

2. During construction all diesel-powered engines shall be required to have particle trapping filters to reduce the amount of polluting emissions. Construction delivery trucks shall not idle for longer than two minutes.

Party responsible for implementation: *Applicant*

Party responsible for monitoring: *Gilroy Planning Division*

3. The following measures shall be incorporated into all project plans, subject to the review and approval of the City of Gilroy Engineering Division:

a. The idling time for construction equipment shall not exceed two minutes;

b. Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use;

c. All equipment shall be properly tuned and maintained in accordance with the manufacturer's specifications;

d. When feasible, alternative fueled or electrical construction equipment shall be used at the project site;

e. Use the minimum practical engine size for construction equipment; and

f. Gasoline-powered equipment shall be equipped with catalytic converters, where feasible.

Party responsible for implementation: *Applicant*

Party responsible for monitoring: *Gilroy Planning Division*

4. The following dust control measures shall be incorporated into all permits for the proposed project, subject to the review and approval of the City of Gilroy Engineering Division:

a. Water all active construction areas at least twice daily;

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

c. 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;

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

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

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

g. Limit traffic speeds on unpaved roads to 15 mph;

h. Install sandbags or other erosion control measures to prevent silt runoff to public roadways;

i. Replant vegetation in disturbed areas as quickly as possible; and

j. Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.

Party responsible for implementation: *Applicant*

Party responsible for monitoring: *Gilroy Engineering Division*

5. Pre-construction surveys for nesting raptors shall be conducted by a qualified biologist if construction is to occur during the nesting season (April 15 – August 1) to reduce impacts to a less than significant level. If raptor nests are located during pre-construction surveys, a qualified biologist shall establish a 300-foot buffer around each nest for the duration of the breeding season (until such time as the young are fully fledged) to prevent nest harassment and brood mortality. Work may proceed prior to August 1 only if a qualified biologist conducts nest checks and establishes that the young are fully fledged. Every effort will be made to avoid removal or impact to known raptor nests within project boundaries. If trees known to support raptor nests cannot be avoided, removal of these trees will only occur during the non-breeding season to reduce impacts to a less than significant level.

Party responsible for implementation: *Applicant*

Party responsible for monitoring: *Gilroy Planning Division*

6. Prior to future development activities, a 50-foot setback from the high water mark of Uvas Creek shall be established for the protection of the water corridor. Although a majority of this corridor is likely to occur on the property owned by the Santa Clara Valley Water District, a portion of the setback may occur on the project site. Grading and equipment shall not be allowed within this setback. If disturbance is proposed within or above the creek bed, a Section 404 permit from the USACE and a Streambed Alteration Agreement from CDFG shall be obtained.

   Party responsible for implementation: *Applicant*

   Party responsible for monitoring: *Gilroy Planning Division*

7. In order to prevent the spread of invasive non-native species, the project proponent shall prepare a landscaping and re-vegetation plan to include the following requirements:

   a. An eradication plan for plants listed in California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* currently growing on the project site;

   b. Use of plants listed in California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* shall be prohibited;

   c. Exposed soil areas shall be planted, mulched, or covered between October 15 and the following April 15 each year;

   d. Plant materials used in landscaping, erosion control, or habitat restoration shall consist of plants that are included in an appropriate native California plants as identified by a qualified biologist or landscape architect; and

   e. To prevent erosion and conserve water, bare soil between newly installed plant materials shall be mulched, covered with jute netting, or seeded with a mix of seeds best suited for the climate and soil conditions, and native to the Gilroy region.

8. Prior to issuance of a grading permit, the following measures shall be incorporated into the project plans to mitigate construction noise, subject to the review and approval of the City of Gilroy Engineering and Building divisions:

   a. Construction shall be limited to weekdays between 7 AM and 7 PM, and Saturdays between 9 AM and 7 PM, with no construction on Sundays or City holidays;

   b. All internal combustion engine-driven equipment shall be equipped with mufflers that are in good condition and appropriate for the equipment; and

c. Stationary noise-generating equipment shall be located as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.

Party responsible for implementation: *Applicant*

Party responsible for monitoring: *Gilroy Planning Division*

11. The developer shall review the existing barrier along Luchessa Avenue to determine if a three-foot high extension could be added. If this is not effective and/or feasible, a new, nine-foot high barrier shall be constructed in its place. The extension or new barrier shall be constructed prior to issuance of a grading permit for the project site, or when the City determines that noise exposure at this location exceeds city standards. The developer shall be responsible for the cost to study and construct the replacement wall or extension.

    The entire wall shall be textured and colored, and screened to the extent feasible with drought tolerant, low maintenance landscaping. Any new wall shall be constructed within existing non-access strips on private property, if existing, otherwise immediately adjacent to the property boundary on the public right-of-way.

    Party responsible for implementation: *Applicant*

    Party responsible for monitoring: *Gilroy Planning Division*

12. Prior to issuance of building permits for residences with yards within 175 feet of the sports park, the applicant shall demonstrate that noise levels at residential yards are in compliance with the standards of Gilroy General Plan Policy 26.02. This may be accomplished by the construction of a six-foot sound barrier, however, such barrier shall not impinge on the SCVWD flood flowage easement recorded on the project site. A noise study shall be prepared, based on final improvement plans, to demonstrate that the residences are adequately protected from noise impacts.

    Party responsible for implementation: *Applicant*

    Party responsible for monitoring: *Gilroy Planning Division*

13. Subject to the review and approval of the City of Gilroy Building Division, the applicant for any residential development on the project site shall conduct an acoustical study and establish engineering requirements to be included in construction plans to maintain interior noise levels at no greater than 45 dBDNL. Approaches to noise reductions could include use of triple pane windows, ventilation systems with non-operable windows, or noise attenuating wall construction.

    Party responsible for implementation: *Applicant*

Party responsible for monitoring: *Gilroy Building Division*

14. The developer of the first project on the project site shall install a full eight-phase signal operation at the Monterey Street/Tenth Street intersection to provide protected left turns on the eastbound and westbound approaches and increase the capacity of the left-turn movement. The signal shall be installed prior to issuance of the first residential or commercial occupancy permit, subject to review and approval by the City Engineering Division.

Party responsible for implementation: *Applicant*

Party responsible for monitoring: *Gilroy Planning Division*

16. The developer shall construct frontage improvements along Luchessa Avenue and Monterey Street concurrent with adjacent development on the project site. The pedestrian improvements shall be completed prior to the issuance of occupancy permits for the adjacent uses. The frontage improvements shall include construction of a half-street section including the eastbound lanes of Luchessa Avenue, the southbound lanes of Monterey Street, and adjacent sidewalks, curbs, gutters, and landscaping, and the re-striping of the pedestrian crosswalks serving the southwest corner of the Monterey Street and Luchessa Avenue intersection.

Party responsible for implementation: *Applicant*

Party responsible for monitoring: *Gilroy Planning Division*

18. Due to the possibility that significant buried cultural resources might be found during construction, the City of Gilroy shall ensure that the following language is included in any grading or construction documents issued for the proposed project that could include earth movement:

If archaeological resources or human remains are discovered during construction, work shall be halted at a minimum of 200 feet from the find and the area shall be staked off. The project developer shall notify a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented.

Party responsible for implementation: *Applicant*

Party responsible for monitoring: *Gilroy Planning Division*

19. In the event of an accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the City of Gilroy shall ensure that the following language is included in any grading or construction documents issued for the proposed school that could include earth movement in accordance with CEQA Guidelines section 15064.5(e):

If human remains are found during construction there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Gilroy Police Department has contacted the coroner of Santa Clara County to determine that no investigation of the cause of death is required. If the coroner determines the remains to be Native American the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code Section 5097.98. The landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if: a) the Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission; b) the descendent identified fails to make a recommendation; or c) the landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

Party responsible for implementation: *Applicant*

Party responsible for monitoring: *Gilroy Planning Division*

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DRAFT
SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

BARBERI URBAN SERVICE AREA AMENDMENT (04-02)

SCH# 1998102079

PREPARED FOR

City of Gilroy

August 24, 2005

EMC PLANNING GROUP INC.
A LAND USE PLANNING & DESIGN FIRM

301 Lighthouse Avenue Suite C Monterey California 93940 Tel 831·649·1799 Fax 831·649·8399
www.emcplanning.com

BARBERI URBAN SERVICE AREA AMENDMENT (04-02)

Draft
Subsequent Environmental Impact Report

SCH #1998102079

PREPARED FOR
City of Gilroy
Cydney Casper, Planner II
7351 Rosanna Street
Gilroy, CA 95020
Tel 408.846.0400

PREPARED BY
EMC Planning Group Inc
301 Lighthouse Avenue Suite C
Monterey CA 93940
Tel 831.649.1799
Fax 831.649.8399
contactus@emcplanning.com
www.emcplanning.com

August 24, 2005

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Summary

CEQA Guidelines section 15123 requires an EIR to contain a brief summary of the proposed project and its consequences. The summary identifies each significant effect and the proposed mitigation measures and alternatives to reduce or avoid that effect; areas of controversy known to the lead agency; and issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

Summary of Proposed Project

Location

The project site is located immediately south of the City of Gilroy in an unincorporated portion of Santa Clara County, approximately 35 miles south of San Jose, 10 miles south of Morgan Hill and 30 miles northeast of Salinas. The project site consists of four parcels located south of Luchessa Avenue, west of Monterey Road, north of the City's planned and partially constructed sports park, and east of Uvas Creek, in Santa Clara County adjacent to the Gilroy city limits. The project site is located on Assessor's parcel numbers (APNs) 808-21-008, 808-21-009, 808-21-016 and 808 21-018.

Background

The project site was part of proposed Urban Service Area (USA) Amendment 98-03, which also included the sports park site and six commercial parcels to the south. In conjunction with that amendment proposal, two environmental impact reports were prepared.

Project Description

The proposed project is an amendment to the City of Gilroy USA to include a 27.7-acre area with a land use designation of Neighborhood District, and pre-zoning of the project site to the Neighborhood District zoning district. The probable development scenario used for evaluation in this EIR includes 18,000 square feet of commercial uses near Monterey Road, 220 small lot single-family residential units, and 30 apartments or condominiums on the remainder of the project site. No development applications have been submitted to date.

Areas of Known Controversy

Controversial issues associated with the USA amendment request and development of the project site are as follows: 1) premature conversion of prime farmland given the available land within the existing city limits for residential development, and 2) the long-term noise impacts along Luchessa Avenue.

Summary of Project Effects

The following section provides a summary of impacts and mitigation measures. Refer to Section 2.0 Environmental Setting, Impacts and Mitigation Measures, and Section 3.0 Related Environmental Issues, for the full text of mitigation measures.

Significant Impacts and Mitigation Measures

Air Quality

Potentially Significant Impact - Diesel Emissions. Sensitive receptors could be exposed to construction emissions, including diesel, during construction.

Summary of Mitigation - Diesel-powered engines on construction equipment shall be required to have particle trapping filters to reduce the amount of polluting emissions. Construction delivery trucks shall not idle for longer than two minutes. Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use. All equipment shall be properly tuned and maintained in accordance with the manufacturer's specifications.

Potentially Significant Impact - Construction Dust Emissions. Sensitive receptors could be exposed to dust (PM_{10}) from grading operations and other soil disturbance during construction.

Summary of Mitigation - The following dust control measures shall be incorporated into all permits for the proposed project: Water all active construction areas at least twice daily; 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; replant vegetation in disturbed areas as quickly as possible; install wheel washers for all exiting trucks or wash off tires or tracks of all trucks and equipment leaving the site.

Biological Resources

Potentially Significant Impact - Raptor Nests. Cottonwood and sycamore trees present near the project site have the potential to provide suitable nesting habitat for raptors. If

there were active nest(s) of protected bird species present, construction and site preparation activities, if conducted during the nesting season, could result in the direct loss of nests, including eggs and young, or the abandonment of an active nest by the adults.

Summary of Mitigation - Pre-construction surveys for nesting raptors will be conducted by a qualified biologist if construction is to occur during the nesting season (April 15 – August 1) to reduce impacts to a less than significant level. Every effort will be made to avoid removal or impact to known raptor nests within project boundaries. If trees known to support raptor nests cannot be avoided, removal of these trees will only occur during the non-breeding season.

Potentially Significant Impact - Waters of the U.S. Uvas Creek is located approximately 50 feet from the western boundary of the project site. No other rivers, streams, or ponded areas that would be considered waters of the U.S. or wetlands are present on the project site. Disturbance to Uvas Creek is would be a potentially significant impact resulting from construction on the portions of the project site nearest to Uvas Creek.

Summary of Mitigation - Prior to future development activities, a 50-foot setback from the high water mark of Uvas Creek shall be established for the protection of the water corridor. Grading and equipment shall not be allowed within this setback. If disturbance is proposed within or above the creek bed, a Section 404 permit shall be obtained.

Potentially Significant Impact - Establishment of Non-native Plants. A number of invasive species listed on the California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* (CALEPC 1999) are present within the property boundaries, including milk thistle (*Silybum marianum*) and bull thistle (*Cirsium vulgare*). Grading and disturbance associated with the proposed project would remove any native plants currently growing at the project site and would also create the disturbed environment preferred by invasive species.

Summary of Mitigation - In order to prevent the spread of invasive non-native species, the project proponent shall prepare a landscaping and re-vegetation plan to include the following requirements: an eradication plan for plants listed in California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* currently growing on the project site; use of plants listed in California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* shall be prohibited; exposed soil areas shall be planted, mulched, or covered between October 15 and the following April 15 each year; plant materials used in landscaping, erosion control, or habitat restoration shall consist of plants that are included in an appropriate native California plants as identified by a qualified biologist or landscape architect; and to prevent erosion and conserve water, bare soil between newly installed plant materials shall be mulched, covered with jute netting, or seeded with a mix of seeds best suited for the climate and soil conditions, and native to the Gilroy region.

Noise

Potentially Significant Impact - Short-Term Construction Noise. Short-term noise could occur from construction activities at the project site. The temporary elevation of noise may pose a significant impact to nearby residents.

Summary of Mitigation - Prior to issuance of a grading permit, the following measures shall be incorporated into the project plans to mitigate construction noise: Construction shall be limited to weekdays between 7 AM and 7 PM and Saturdays and holidays between 9 AM and 7 PM, with no construction on Sundays or holidays; All internal combustion engine-driven equipment shall be equipped with mufflers that are in good condition and appropriate for the equipment; and Stationary noise-generating equipment shall be located as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.

Significant Impact - Noise Exposure at Proposed Residences in Excess of City Standards. Proposed residences on the project site along Monterey Street and Luchessa Avenue would experience noise levels that exceed the City's standards for residences.

Summary of Mitigation - When residential development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. If residential lots are proposed within 235 feet south of the Luchessa Avenue centerline (195 feet from the present property line), or within 470 feet of the centerline of Monterey Street, up to a nine-foot tall noise barrier may be required between the lots and Luchessa Avenue or Monterey Street.

Significant Impact - Noise Exposure at Proposed Commercial. Proposed commercial buildings, on the project site along Monterey Street and Luchessa Avenue, would experience exterior noise levels that exceed City's standards.

Summary of Mitigation - When commercial development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. Preliminary evaluation concludes that no commercial building doors or operable windows should be allowed within 110 feet south of the Luchessa Avenue centerline, or within 225 feet west of the of Monterey Street centerline, and no outdoor use should be allowed in these areas.

Significant Impact - Noise Impact on Existing Residences North of Luchessa Avenue. Traffic generated by the proposed project would increase ambient noise levels along Luchessa Avenue by one to two decibels.

Summary of Mitigation - The developer shall review the existing barrier along Luchessa Avenue to determine if a three-foot high extension could be added. If this is not effective and/or feasible, a new, nine-foot high barrier shall be constructed in its place.

Significant Impact - Sports Park-generated Noise. Sports park noise at the southern boundary of the project site would exceed City standards for residential uses.

Summary of Mitigation - Prior to issuance of building permits for residences with yards within 175 feet of the sports park, the applicant shall demonstrate that noise levels at residential yards are in compliance with the standards of Gilroy General Plan Policy 26.02.

Potentially Significant Impact - Residential Interior Noise Levels. Traffic noise would result in interior noise levels in existing and proposed residences in excess of City standards.

Summary of Mitigation - Subject to the review and approval of the City of Gilroy Building Division, the applicant for any residential development on the project site shall conduct an acoustical study.

Traffic/Transportation

Potentially Significant Impact - Left turn Delays at Monterey Street/Tenth Street Intersection. This intersection would operate at an acceptable level of service during project conditions. However, the permitted phasing for the eastbound and westbound left-turn movements causes excessive delays for left-turning vehicles.

Summary of Mitigation- The developer of the first project on the project site shall install a full eight-phase signal operation at the Monterey Street/Tenth Street intersection, to provide protected left turns on the eastbound and westbound approaches and increase the capacity of the left-turn movement.

Potentially Significant Impact - Commercial Site Access. Access to the commercial site from Monterey Street could result in conflicts with other movements along Monterey Street.

Summary of Mitigation - Prior to Architectural and Site Review Approval for the commercial area or high-density residential uses along Monterey Street, a traffic study shall be performed to evaluate traffic flow and turning movements along Monterey Street and Luchessa Avenue.

Potentially Significant Impact - Pedestrian and Bicycle Circulation. Continuous sidewalks are not provided on the south side of Luchessa Avenue, restricting pedestrian access in and around the project site, and resulting in a potentially dangerous pedestrian environment.

Summary of Mitigation- The developer shall construct frontage improvements along Luchessa Avenue and Monterey Street concurrent with adjacent development on the project site. Site plans and tentative maps shall include the following bicycle and pedestrian connections: a connection to the Uvas Creek trail; a connection near the center of the project site to the Sports Park; and a connection between the commercial and residential areas.

Cultural Resources

Potentially Significant Impact - Disturbance of Cultural Resources. It is possible that that construction of the proposed project could disturb unknown archaeological resources.

Summary of Mitigation - Standard City procedures will be followed to ensure unknown cultural resources are not disturbed; Native American tribes potentially affected by the proposed project will be informed. An archeological monitor will be present during ground-disturbing activities.

Hydrology and Water Quality

Potentially Significant Impact - Development in FEMA Flood Zone. About four acres at the eastern end of the project site are within the FEMA 100-year flood zone, and subject to less than one foot of inundation during a 100-foot storm. About one acre in the south central portion of the project site is within a flood flowage easement. Development could affect, or be affected by, flood water flows.

Summary of Mitigation – A hydrology report shall be prepared by a qualified hydrologist or engineer, for tentative maps or architectural and site reviews within the flood areas, to address issues of site drainage, storm water run-off quantity and quality, and on-site storm water flow, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to issuance of a grading permit.

Potentially Significant Impact - Storm Water Runoff. Urban contaminants from the proposed project could be transported to the drainage system, polluting downstream water systems. The potential for contamination exists during both the construction and operation of the proposed project.

Summary of Mitigation - The applicant shall be required to prepare storm drainage improvement plans for each project phase, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to approval of the final map. The applicant shall, for each phase of the project, submit a Notice of Intent (NOI) and detailed engineering designs to the Central Coast RWQCB.

Significant Cumulative Effects

Significant Impact - Luchessa Avenue/Thomas Road Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during both peak hours.

Significant Impact - Luchessa Avenue/Princevalle Street Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during both peak periods.

Significant Impact - Monterey Street/Luchessa Avenue Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during the PM peak hour.

Significant Impact - Monterey Street/Tenth Street Intersection. Under cumulative conditions, this intersection would operate at unacceptable level of service (LOS E-) during the PM peak hour.

Summary of Mitigation - If the following improvements, or equivalent as determined by the Gilroy Engineering Division, are not included in the City's traffic fee program at the time traffic impact fees are paid, the developer shall pay a pro-rata share of the cost of each improvement not included in the fee program in addition to standard traffic impact fees: Luchessa Avenue and Thomas Road: a traffic signal or traffic circle; Luchessa Avenue and Princevalle Street: a traffic signal; Monterey Street and Luchessa Avenue: an additional northbound left-turn lane and widening of the west leg to provide two receiving lanes for the northbound left-turning vehicles; Monterey Street and Tenth Street: a second southbound left-turn lane, a westbound overlap phase, one left-turn lane, two through lanes, and one separate right-turn lane on northbound Monterey Street. The project that triggers unacceptable levels of service at these locations will be required to design and construct the improvements and submit their costs to the City for reimbursement our of the traffic impact fee program funds.

Significant Unavoidable Impacts

Air Quality

Significant and Unavoidable - The proposed project would contribute to significant unavoidable cumulative air quality impacts.

Summary of Mitigation - Standard mitigation measures, presented above would not reduce the impact to a less than significant level.

Agricultural Resources

Significant and Unavoidable Impact - Loss of Prime Agricultural Land. The proposed project would result in the loss of 27.7 acres of prime farmland that has a LESA score that indicates agricultural land of significant value.

Summary of Mitigation - Implementation of the City's Agricultural Mitigation Policy would be required. However, the impact would still be considered significant and unavoidable.

Noise/Aesthetic

Significant and Unavoidable Visual Impact - Construction of a noise barrier greater than seven feet in height would be considered a significant visual impact, in accordance with the City of Gilroy thresholds of significance for aesthetics.

Summary of Alternatives

Alternative 1 – No Project Alternative

The "no project" alternative occurs if the City or Santa Clara County LAFCO denies the request for a USA amendment for the project site. In this circumstance, no development would take place on the project site and the project site would remain within unincorporated Santa Clara County as primarily agricultural land.

Alternative 2 – Alternate Location

The "alternate location" is along the west side of Monterey Street near Cohansey Avenue. The alternate location is comprised of six parcels witha total of 34.7 acres. The alternate location is within the Gilroy USA and city limits. Most of the alternate location is designated Neighborhood District in the general plan.

Alternative 3 – Additional Commercial Alternative

The "reduced residential/additional commercial" alternative would decrease the number of single-family residences and increase the amount of commercial uses. The commercial area would be increased to about 38,000 square feet, on about three acres, and would be expanded westward along Luchessa Avenue to the intersection with Hyde Park Street.

Comparison of Alternatives

The "no project" alternative would be the superior alternative, because by keeping the project site in its current agricultural uses there would be no significant environmental impacts. The second environmentally superior alternative would be the "alternate location" alternative because the loss of prime farmland would be avoided.

TABLE S-1

Summary of Impacts and Mitigation Measures

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
Agriculture	Prime Farmland	Significant and Unavoidable	1. The applicant shall negotiate with the City of Gilroy to identify one of the following mitigation measures to reduce the impact to agricultural resources: a. Purchase an equal amount of land (1:1 ratio) of agricultural land within the "Preferred Areas" and the transfer of ownership of this land to the Open Space Authority or other City-approved agency. b. Purchase of development rights to a 1:1 ratio on agricultural land within the "Preferred Areas" and the transfer of ownership of these rights to the Open Space Authority or other City-approved agency. The purchase value of this agricultural conservation easement will be based upon the appraisal of purchasing development rights and not fee-title rights. c. Payment of an in-lieu fee will be based upon the lowest appraisal of purchasing development rights in the "Preferred Areas."	Significant and Unavoidable
Air Quality	Construction Emissions	Significant	2. During construction all diesel-powered engines shall be required to have particle trapping filters to reduce the amount of polluting emissions. Construction delivery trucks shall not idle for longer than two minutes. 3. The following measures shall be incorporated into all project plans, subject to the review and approval of the City of Gilroy Engineering Division:	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
			a. The idling time for construction equipment shall not exceed two minutes; b. Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use; c. All equipment shall be properly tuned and maintained in accordance with the manufacturer's specifications; d. When feasible, alternative fueled or electrical construction equipment shall be used at the project site; e. Use the minimum practical engine size for construction equipment; and f. Gasoline-powered equipment shall be equipped with catalytic converters, where feasible.	
Air Quality	Construction Dust	Significant	4. The following dust control measures shall be incorporated into all permits for the proposed project, subject to the review and approval of the City of Gilroy Engineering Division: a. Water all active construction areas at least twice daily; b. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard; c. 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; d. Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites; e. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets;	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
			f. Enclose, cover and water twice daily or apply non-toxic soil binders to exposed stockpiles (dirt, sand); g. Limit traffic speeds on unpaved roads to 15 mph; h. Install sandbags or other erosion control measures to prevent silt runoff to public roadways; i. Replant vegetation in disturbed areas as quickly as possible; and j. Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.	
Biology	Raptor Nests	Potentially Significant	5. Pre-construction surveys for nesting raptors shall be conducted by a qualified biologist if construction is to occur during the nesting season (April 15 – August 1) to reduce impacts to a less than significant level. If raptor nests are located during pre-construction surveys, a qualified biologist shall establish a 300-foot buffer around each nest for the duration of the breeding season (until such time as the young are fully fledged) to prevent nest harassment and brood mortality. Work may proceed prior to August 1 only if a qualified biologist conducts nest checks and establishes that the young are fully fledged. Every effort will be made to avoid removal or impact to known raptor nests within project boundaries. If trees known to support raptor nests cannot be avoided, removal of these trees will only occur during the non-breeding season to reduce impacts to a less than significant level.	Less than Significant
Biology	Waters of the U.S.	Potentially Significant	6. Prior to future development activities, a 50-foot setback from the high water mark of Uvas Creek shall be established for the protection of the water corridor. Although a majority of this corridor is likely to occur on the property owned by the Santa Clara Valley Water District, a portion of the setback may occur on the project site. Grading and equipment shall not be allowed within this setback. If	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
			disturbance is proposed within or above the creekbed, a Section 404 permit from the USACE and a Streambed Alteration Agreement from CDFG shall be obtained.	
Biology	Establishment of Non-Native Plants	Potentially Significant	7. In order to prevent the spread of invasive non-native species, the project proponent shall prepare a landscaping and re-vegetation plan to include the following requirements: a. An eradication plan for plants listed in California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* currently growing on the project site; b. Use of plants listed in California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* shall be prohibited; c. Exposed soil areas shall be planted, mulched, or covered between October 15 and the following April 15 each year; d. Plant materials used in landscaping, erosion control, or habitat restoration shall consist of plants that are included in an appropriate native California plants as identified by a qualified biologist or landscape architect; and e. To prevent erosion and conserve water, bare soil between newly installed plant materials shall be mulched, covered with jute netting, or seeded with a mix of seeds best suited for the climate and soil conditions, and native to the Gilroy region.	Less than Significant
Noise	Construction Noise	Potentially Significant Impact	8. Prior to issuance of a grading permit, the following measures shall be incorporated into the project plans to mitigate construction noise, subject to the review and approval of the City of Gilroy Engineering and Building divisions: a. Construction shall be limited to weekdays between 7 AM and 7	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
			PM, and Saturdays between 9 AM and 7 PM, with no construction on Sundays or City holidays; b. All internal combustion engine-driven equipment shall be equipped with mufflers that are in good condition and appropriate for the equipment; and c. Stationary noise-generating equipment shall be located as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.	
Noise	Residential Noise Impacts	Significant	9. Associated with project-level environmental review when residential development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. The study shall include descriptions of the exterior and interior noise exposures under existing and future conditions and the mitigation measures necessary to achieve compliance with the City of Gilroy Noise Element and the State of California Code of Regulations, Title 24 (as applied to multi-family housing). If residential lots are proposed within 235 feet south of the Luchessa Avenue centerline (195 feet from the present property line), or within 470 feet of the centerline of Monterey Street, up to a nine-foot tall noise barrier may be required between the lots and Luchessa Avenue or Monterey Street. The barrier shall be consistent with the policies of the general plan, and if feasible, shall be an earth berm. Specific mitigation measures identified in the project specific noise assessment shall be incorporated into the project design.	Less than Significant Note: Construction of a noise barrier greater than seven feet in height would be considered a significant visual impact, in accordance with the City of Gilroy thresholds of significance for aesthetics.

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
Noise	Noise Exposure at Proposed Commercial	Significant	10. Associated with project-level environmental review when commercial development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. The study shall include descriptions of the exterior and interior noise exposures under existing and future conditions and the mitigation measures necessary to achieve compliance with the City of Gilroy Noise Element. Preliminary evaluation concludes that no commercial building doors or operable windows should be allowed within 110 feet south of the Luchessa Avenue centerline, or within 225 feet west of the of Monterey Street centerline, and no outdoor use should be allowed in these areas. Specific mitigation measures identified in the project specific noise assessment shall be incorporated into the project design.	Less than Significant
Noise	Residences North of Luchessa Avenue	Significant	11. The developer shall review the existing barrier along Luchessa Avenue to determine if a three-foot high extension could be added. If this is not effective and/or feasible, a new, nine-foot high barrier shall be constructed in its place. The extension or new barrier shall be constructed prior to issuance of a grading permit for the project site, or when the City determines that noise exposure at this location exceeds city standards. The developer shall be responsible for the cost to study and construct the replacement wall or extension. The entire wall shall be textured and colored, and screened to the extent feasible with drought tolerant, low maintenance landscaping. Any new wall shall be constructed within existing non-access strips on private property, if existing, otherwise immediately adjacent to the property boundary on the public right-of-way.	Less than Significant Note: Construction of a noise barrier greater than seven feet in height would be considered a significant visual impact, in accordance

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
				with the City of Gilroy thresholds of significance for aesthetics.
Noise	Sports Park Generated Noise	Significant	12. Prior to issuance of building permits for residences with yards within 175 feet of the sports park, the applicant shall demonstrate that noise levels at residential yards are in compliance with the standards of Gilroy General Plan Policy 26.02. This may be accomplished by the construction of a six-foot sound barrier, however, such barrier shall not impinge on the SCVWD flood flowage easement recorded on the project site. A noise study shall be prepared, based on final improvement plans, to demonstrate that the residences are adequately protected from noise impacts.	Less than Significant
Noise	Residential Interior Noise Level	Potentially Significant	13. Subject to the review and approval of the City of Gilroy Building Division, the applicant for any residential development on the project site shall conduct an acoustical study and establish engineering requirements to be included in construction plans to maintain interior noise levels at no greater than 45 dBDNL. Approaches to noise reductions could include use of triple pane windows, ventilation systems with non-operable windows, or noise attenuating wall construction.	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
Traffic	Monterey Street/Tenth Street Intersection	Potentially Significant	14. The developer of the first project on the project site shall install a full eight-phase signal operation at the Monterey Street/Tenth Street intersection to provide protected left turns on the eastbound and westbound approaches and increase the capacity of the left-turn movement. The signal shall be installed prior to issuance of the first residential or commercial occupancy permit, subject to review and approval by the City Engineering Division.	Less than Significant
Traffic	Commercial Site Access	Potentially Significant	15. Prior to Architectural and Site Review Approval for the commercial area or high-density residential uses along Monterey Street, or other residential development if an access street is proposed to connect to Monterey Street, a traffic study and engineering design shall be performed to evaluate traffic flow and turning movements along Monterey Street and Luchessa Avenue, and determine suitability of driveway locations on Monterey Street and Luchessa Avenue. If necessary, full access may be provided by an internal street. Driveways along Monterey Street shall be limited to right turns in and out.	Less than Significant
Traffic	Circulation	Potentially Significant	16. The developer shall construct frontage improvements along Luchessa Avenue and Monterey Street concurrent with adjacent development on the project site. The pedestrian improvements shall be completed prior to the issuance of occupancy permits for the adjacent uses. The frontage improvements shall include construction of a half-street section including the eastbound lanes of Luchessa Avenue, the southbound lanes of Monterey Street, and adjacent sidewalks, curbs, gutters, and landscaping, and the re-striping of the pedestrian crosswalks serving the southwest corner of the Monterey Street and Luchessa Avenue intersection. 17. Site plans and tentative maps shall include the following bicycle	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
			and pedestrian connections: a. a connection to the Uvas Creek trail; b. a connection near the center of the project site to the Sports Park; and c. a connection between the commercial and residential areas (this connection would be satisfied if an internal street with sidewalk were provided).	
Cultural Resources	Disturbance of Cultural Resources	Potentially Significant	18. Due to the possibility that significant buried cultural resources might be found during construction the following language shall be included in any permits issued for the project site, including, but not limited to building permits for future development, subject to the review and approval of the Gilroy Planning Division: If archaeological resources or human remains are discovered during construction, work shall be halted at a minimum of 200 feet from the find and the area shall be staked off. The project developer shall notify a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented. 19. In the event of an accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the City shall ensure that this language is included in all permits in accordance with CEQA Guidelines section 15064.5(e): If human remains are found during construction there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Gilroy Police Department contacts the coroner of Santa Clara County to determine that no investigation of the cause of death is required. If	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
			the coroner determines the remains to be Native American the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent (MLD) from the deceased Native American. The MLD may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code Section 5097.98. The landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if: a) the Native American Heritage Commission is unable to identify a MLD or the MLD failed to make a recommendation within 24 hours after being notified by the commission; b) the descendent identified fails to make a recommendation; or c) the landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.	
Hydrology/ Water Quality	FEMA Flood Zone	Potentially Significant	20. Prior to approval of a tentative map or architectural and site review for the area located within the flood zone, the applicant shall submit a hydrology report, prepared for the project by a qualified hydrologist or engineer, to address issues of site drainage, storm water run-off quantity and quality, and on-site storm water flow, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to issuance of a grading permit. All grading, design or other recommendations of this report shall be incorporated into project plans.	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
Hydrology/ Water Quality	Storm Water Runoff and Quality	Potentially Significant	21. The applicant shall be required to prepare storm drainage improvement plans for each project phase, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to approval of the final map. The storm drainage improvement plan shall be designed to maintain post-development run-off rates at or below existing run-off rates. 22. The applicant shall, for each phase of the project, submit a Notice of Intent (NOI) and detailed engineering designs to the Central Coast RWQCB. This permit shall require development and implementation of a SWPPP that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site. The SWPPP must include Best Management Practices that address source reduction and, if necessary, shall include practices that require treatment. The SWPPP shall be submitted to the City of Gilroy Engineering Division for review and approval prior to approval of a grading permit for each phase of the project. 23. For projects located within 50 feet of Uvas Creek, the applicant shall submit plans for review by, and obtain an approved permit from the Santa Clara Valley Water District (SCVWD) prior to approval of a grading permit.	Less than Significant

Area of Concern	Impact	Level of Significance	Mitigation Measure	Mitigated Impact
Cumulative Traffic	Luchessa Avenue Thomas Road Intersection Luchessa Avenue Princevalle Street Intersection Monterey Street Luchessa Avenue Intersection Monterey Street Tenth Street Intersection	Potentially Significant	24. If the following improvements, or equivalent as determined by the Gilroy Engineering Division, are not included in the City's traffic fee program at the time traffic impact fees are paid, the developer shall pay a pro-rata share of the cost of each improvement not included in the fee program in addition to standard traffic impact fees. 1. Luchessa Avenue and Thomas Road: a traffic signal or traffic circle; 2. Luchessa Avenue and Princevalle Street: a traffic signal; 3. Monterey Street and Luchessa Avenue: an additional northbound left-turn lane and widening of the west leg to provide two receiving lanes for the northbound left-turning vehicles; 4. Monterey Street and Tenth Street: a second southbound left-turn lane, a westbound overlap phase, one left-turn lane, two through lanes, and one separate right-turn lane on northbound Monterey Street.	Less than Significant

1.0 Introduction

1.1 Report Authorization and Purpose

Determination to Prepare a Subsequent Environmental Impact Report

The City of Gilroy acting as the lead agency, has determined that the proposed Barberi Urban Service Area Amendment (USA) 04-02 (hereinafter "proposed project") may result in significant adverse environmental effects, as defined by the *California Environmental Quality Act* ("CEQA") Guidelines section 15064.

According to CEQA Guidelines section 15162(a)(1), a subsequent EIR ("SEIR") is required when, after certification of an EIR, substantial changes to a project are proposed that would require major revisions of the previous EIR due to the potential for new or significantly increased environmental effects.

Inclusion of the project site in the City's Urban Services Area was previously proposed and analyzed in the *Gilroy Sports Park and USA Amendment EIR (USA 98-01)* prepared in 1999, and the *Gilroy USA Amendment Subsequent EIR 98-03*, prepared in 2000. These documents are available for review at the City of Gilroy Community Development Department during regular business hours. Both of these EIRs included a sports park site and six commercial parcels on 112.49 acres to the south, in addition to the current project site. The former analyzed the project site as open space, and the latter analyzed development of 147 residential units on the project site. The proposed project may include up to 250 residential units and 18,000 square feet of commercial development. Therefore, the City of Gilroy has had this SEIR prepared to evaluate the potentially significant adverse environmental impacts of the proposed project that may not have been adequately addressed in the prior environmental documents.

Based upon the decision to prepare an SEIR, the City of Gilroy prepared and distributed a notice of preparation ("NOP"), from May 5, 2005 to June 3, 2005 in accordance with CEQA Guidelines section 15082. CEQA Guidelines section 15375 defines an NOP as:

> …a brief notice sent by the lead agency to notify the responsible agencies, trustee agencies, and involved federal agencies that the lead agency plans to prepare an SEIR for the project. The purpose of the notice is to solicit guidance from those agencies as to the scope and content of the environmental information to be included in the EIR.

A public scoping meeting was held at the City of Gilroy Council Chambers on May 17, 2005 at 5:00 p.m. City staff and 20 Gilroy residents attended the scoping meeting. A summary of these issues is presented in Appendix A. In addition, written responses to the NOP were received from the following agencies and individuals:

- John Larryak, Gilroy Resident (May 9, 2005)
- Local Agency Formation Commission of Santa Clara County (May 10, 2005)
- California Department of Transportation (May 31, 2005)
- Santa Clara County Department of Roads and Airports (June 3, 2005)
- Santa Clara Valley Transportation Agency (June 6, 2005)

The initial study, NOP, responses to the NOP received from responsible agencies, and a summary of verbal comments received at the scoping meeting, are contained in Appendix A. Input from the NOP process and scoping meeting has been considered in preparing the EIR.

Preparation Standards and Methods

This SEIR has been prepared by EMC Planning Group Inc. (hereinafter "consultant") under contract to the City of Gilroy in accordance with CEQA and implementing guidelines. This SEIR is subsequent to the *Gilroy Sports Park and Urban Service Area Amendment (USA 98-03) EIR* (1999) and the *Gilroy Urban Service Area Amendment 98-03 Subsequent EIR* (2000) and is being prepared in accordance with section 15162 of the CEQA Guidelines. This SEIR has been prepared using available information from the previous certified environmental documents, private and public sources noted herein, as well as information generated by the consultant through current field investigation. This SEIR will be used to inform public decision-makers and their constituents of the environmental impacts of the proposed project.

This SEIR describes and evaluates the existing environmental setting of the project site and surrounding areas, discusses the characteristics of the proposed project, identifies environmental impacts associated with the proposed project, and provides feasible mitigation measures that can be implemented to reduce or avoid identified adverse environmental impacts. This SEIR also evaluates reasonable alternatives to the proposed project.

If an EIR identifies a significant adverse impact, the lead agency may approve the project only if it finds that mitigation measures have been required to reduce the impact's significance, or that such mitigation is infeasible for specified social, economic, and/or other reasons (Public Resources Code section 21081). The lead agency may not omit from the project conditions a mitigation measure associated with a project impact identified in the SEIR as significant, unless it makes specific findings regarding the omission.

This EIR is an objective public disclosure document that takes no position on the merits of the proposed project. Thus, the findings of this SEIR do not advocate a position "for" or "against" the proposed project. Instead, this SEIR provides information on which decisions about the proposed project can be based. The SEIR has been prepared according to the professional standards and practices of the SEIR participants' individual disciplines and in conformance with the legal requirements and informational expectations of CEQA and its implementing guidelines.

1.2 Project Location and Setting

Project Site Location

The project site is located immediately south of the City of Gilroy in an unincorporated portion of Santa Clara County, approximately 35 miles south of San Jose, 10 miles south of Morgan Hill and 30 miles northeast of Salinas. The proposed project consists of four parcels located south of Luchessa Avenue, west of Monterey Road, north of the City's planned and partially constructed sports park, and east of Uvas Creek in Santa Clara County adjacent to the Gilroy city limits. The project site is located on Assessor's parcel numbers (APNs) 808-21-008, 808-21-009, 808-21-016 and 808 21-018. Figure 1, Regional Location, presents the regional location of the project site. Figure 2, Project Vicinity, presents the proposed project in relation to the City of Gilroy. Figure 3, Aerial Photograph, provides an aerial of the project with accompanying assessor's parcel numbers and presents the existing urban service area boundary. The project site is adjacent to the City's USA boundary and the City limits on the north and east. Table 1, Project Site Parcels, lists the project site parcels and acreage.

TABLE 1

Project Site Parcels

Assessor's Parcel Number	Acreage
808-21-008	0.10
808-21-009.	0.70
808-21-016	26.05
808-21-018	0.87
Total	**27.72**

Source: City of Gilroy

Project Site Existing Conditions

The project site is primarily in agricultural row crop production. A parcel on the northeast corner of the project site contains a propane gas facility. Figure 4, Site Photographs, shows photographs of the project site. A Santa Clara Valley Water District flood flowage easement covers about three-quarters of an acre in the south-central portion of the project site.

Project Vicinity Existing Conditions

To the north of the project site is Luchessa Avenue and single family residences, to the east motels and restaurants, to the south is the City sports park currently under construction, and to the west is Uvas Creek. Figure 5, Area Photographs, shows photographs of the surrounding area.

Project Site and Vicinity Planning Designations

The project has a Gilroy general plan land use designation of Neighborhood District. Currently the project site is in an unincorporated portion of Santa Clara County with an agricultural designation of A-20.

The Gilroy general plan Neighborhood District land use designation requires a variety of residential development densities, and encourages small-scale commercial uses. The Gilroy general plan provides a target mix of residential densities in the Neighborhood District. Table 2, Neighborhood District Residential Density Targets, summarizes the target mix for residential densities. It is not expected that every project will meet these density mixes, but rather, it is a goal of the general plan that overall development within Neighborhood District designations attain a mix of densities.

TABLE 2

Neighborhood District Residential Density Targets

Residential Density	Target Percent
High (1 unit/1,452 net sq. ft.)	5% (or more)
Medium (1 unit/2,700 net sq. ft.)	15% (or more)
Duplex (1 unit/4,000 net sq. ft.)	10% (or more)
Low (1 unit/ 6,000 net sq. ft.)	70% (or less)

Source: City of Gilroy General Plan



Not to Scale

Source: EMC Planning Group Inc. 2005

Figure 1
Regional Location

Barberi Urban Service Area Amendment Subsequent EIR

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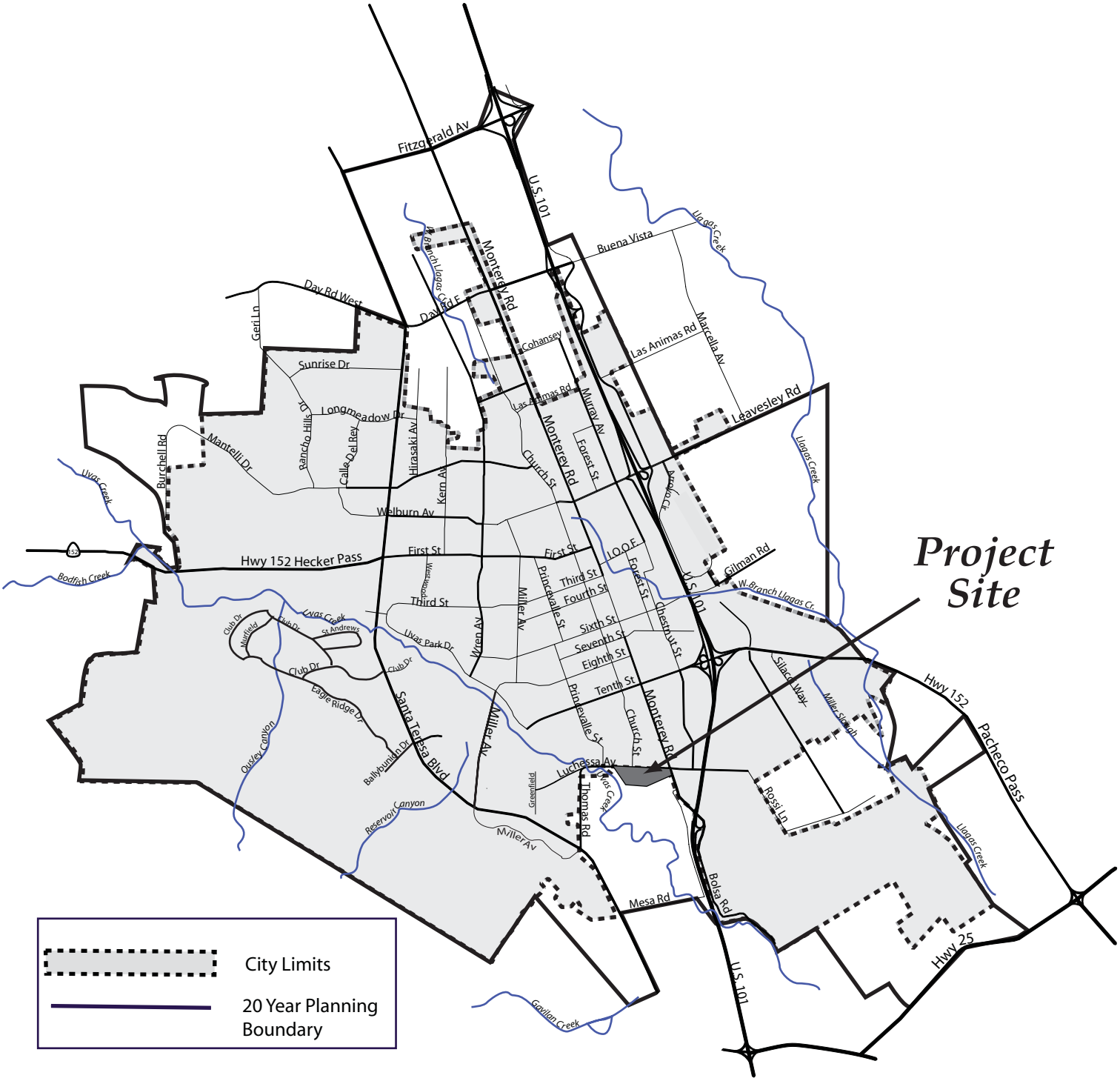

Source: EMC Planning Group Inc. 2005

Figure 2
Project Vicinity

Barberi Urban Service Area Amendment Subsequent EIR

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0 400 feet

Legend

Project Parcels

Urban Service Boundary

Source: EMC Planning Group Inc. 2005, City of Gilroy 2004

Figure 3

Aerial Photograph

Barberi Urban Service Area Amendment SEIR

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Project site viewed from Luchessa Avenue.



View of the project site from near Uvas Creek.



Propane facility on the project site.

Source: EMC Planning Group Inc., 2005

Figure 4

Site Photographs

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View of residences and soundwall north of the project site.



Corner of Luchessa and Monterey east of the project site.



View of Uvas Creek levee south of Luchessa.

Source: EMC Planning Group Inc., 2005

Figure 5

Area Photos

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Background

The project site was part of proposed USA Amendment 98-03, which also included the sports park site and six commercial parcels to the south. In conjunction with that amendment proposal, two environmental impact reports were prepared.

In February 1999 the *Gilroy Sports Park and Urban Service Area Amendment (USA 98-03) EIR* ("USA Amendment EIR") was prepared based on the land uses in the old Gilroy general plan. Because the City was in the process of updating its general plan at the time, LAFCO required further study to analyze the USA Amendment under the proposed land uses of the then-draft general plan update. The project site was analyzed under an Open Space land use designation in that EIR.

In April 2000 the *Gilroy Urban Service Area Amendment 98-03 Subsequent EIR* ("USA Amendment SEIR") was prepared. The project site was analyzed as Neighborhood District in that EIR, with a conceptual development plan for 147 residential units. The conceptual development plan was in the City's Residential Development Ordinance permit allotment system at the time the EIR was prepared.

On March 18, 2002 the City certified the USA Amendment SEIR. LAFCO did not approve amendment of the City's USA to include the adjacent sports park. The sports park is being constructed, but outside the City limits (consultant conversation with Cydney Casper, August 5, 2005).

1.3 Project Description

Project Overview

The proposed project is an amendment to the City of Gilroy USA to include a 27.7-acre area with a land use designation of Neighborhood District, and pre-zoning of the project site to the Neighborhood District zoning district.

USA Amendment

The proposed project is an amendment to the City of Gilroy USA to include a 27.7-acre area with a land use designation of Neighborhood District. If the USA amendment is approved by the City and LAFCO, future approvals would include annexation and pre-zoning to Neighborhood District.

Future Development

After the project site is within the City limits, the area could be subdivided and developed in accordance with the City's subdivision and zoning ordinances. Because

the site is not within the City limits yet, the applicant has not submitted formal development plans for the project site. However, based on preliminary discussions with the City, the applicant is considering development of 18,000 square feet of commercial uses near Monterey Road, 220 small lot single-family residential units, and 30 apartments or condominiums on the remainder of the project site. These preliminary plans are used as a probable development scenario in this EIR.

1.4 Consistency with Local and Regional Plans

CEQA Guidelines section 15125(d), Environmental Setting, states that an EIR shall discuss any inconsistencies between the proposed project and applicable general plans and regional plans. This section includes a discussion of the proposed project's consistency (or inconsistency) with the following plans:

- Gilroy 2002-2020 General Plan
- Santa Clara County Local Agency Formation Commission Urban Service Area Policies
- Bay Area Air Quality Management District (BAAQMD) 2000 Clean Air Plan
- Valley Transportation Authority Congestion Management Plan
- Valley Transportation Plan 2030

Gilroy 2002-2020 General Plan

Policy 1.01 Pattern of Development

> Ensure an orderly, contiguous pattern of development that prioritizes infill development, phases new development, encourages compactness and efficiency, preserves surrounding open space and agricultural resources and avoids land use incompatibilities.

Discussion. The project site has been in the City of Gilroy 20 year planning area since 1979. The project site is adjacent to existing commercial and residential development on its north and east sides and the developing sports park to the south. It is located near a major freeway interchange and is situated along Monterey Road, a principal north-south arterial in the City. The project site could be considered appropriate for inclusion in the USA because of its proximity to existing development and major transportation facilities, and because services are already available adjacent to the project site.

Policy 2.01 Location of Growth

> Maximize existing infrastructure and service investments and avoid premature investment for facility and service extensions by directing new growth to vacant and under utilized lands within the USA. As a second tier priority, direct new development to areas that border on existing urban development or are immediately adjacent to the USA prohibiting costly "leap frog" development and ensuring a compact development pattern.

Discussion. The project site is located immediately adjacent to commercial and residential development within the existing USA on its north and east sides, and the developing sports park to the south. Existing infrastructure is located adjacent to the project site.

Santa Clara County Local Agency Formation Commission Urban Service Area Amendment Policies

The local agency formation commissions were created by the Knox-Nisbet Act in 1963 to govern changes in the boundaries and organization of cities and special districts in California. This act was supplemented by the District Reorganization Act of 1965 and the Municipal Organization Act of 1977. These three laws were consolidated under the Cortese-Knox Local Government Reorganization Act of 1985 (Government Code section 56000 et seq.).

Urban Service Area Amendment Policy 1

> LAFCO will review/amend a city's Urban Service Area once a year, if such review is desired by the city and initiated by city resolution and application. Until a city's application has been heard and acted upon by the Commission, no further Urban Service Area amendments will be accepted for filing from that city. LAFCO may make an exception to the "once a year" limitation upon Urban Service amendment requests where amendment is needed to carry out some special institutional development or activity that is in the public interest. Such exception shall not normally be extended in connection with proposed residential, commercial, or industrial development.

Discussion. This application is expected to go to the Gilroy City Council in December of 2005. If the City Council approves this application, an application will be made to LAFCO in 2006. The City has not submitted an application to LAFCO for several years.

Urban Service Area Amendment Policy 2

LAFCO will require application of an appropriate general plan designation to territory proposed for inclusion in an Urban Service Area.

Discussion. The parcels comprising the project site have a general plan designation of Neighborhood District, which is consistent with its proposed use.

Urban Service Area Amendment Policy 3

LAFCO will consider factors such as the following to determine the local and regional impacts of a proposed Urban Service Area amendment:

a. The ratio of lands planned for residential use to land planned for employment-producing use;

b. The existence of adequate regional and local transportation capabilities to support the planned city growth;

c. Ability of the city to provide urban services to the growth areas without detracting from current service levels;

d. The ability of school districts to provide school facilities;

e. Whether the conversion of agricultural and other open space lands is premature, or if there are other areas into which to channel growth;

f. The role of special districts in providing services;

g. Environmental considerations, which may apply;

h. The impacts of proposed city expansion upon the County as a provider of services; and

i. Fiscal impacts on other agencies.

Discussion: Each of these factors is discussed below.

a. No specific development plans have been submitted but based on the preliminary discussions with the City, the applicant is considering development of 18,000 square feet of commercial uses nearest Monterey Road, 220 small lot single-family residential units, and 30 apartments or condominiums on the remainder of the project site. This mix of land use is consistent with the Neighborhood District land use designation.

b. The proposed project would be served by U.S. Highway 101, Monterey Road, and other local streets. See Section 2.6, Transportation/Traffic, of this SEIR for additional discussion.

c. The City of Gilroy would extend water supply lines and sewer and storm drain lines to the project site. The City of Gilroy police and fire departments would provide public safety services to the project site. This extension of services would not reduce the level of service available to other areas of the city. See Section 2.7, Utilities and Service Systems, of this SEIR for additional discussion.

d. The proposed project would have an incremental impact on local schools. This impact would be offset by the payment of standard school impact fees. See Section 2.5, Public Services, of this SEIR for additional discussion.

e. The project site has been in the City of Gilroy 20-year planning area since 1979. The parcels north of the project site are within the city limits, and developed with houses. Parcels east of the project site, on the east side of Monterey Road from U.S. Highway 101 to Luchessa Avenue, are designated highway commercial, and developed with hotels and other visitor services. The land immediately south is the developing sports park, the first phase of which is currently under construction. The Uvas Creek bicycle trail is being extended along the eastern side of Uvas Creek, from its current terminus at Luchessa Avenue to the Sports Park. The project site will soon be adjacent to non-agricultural developed uses on its entire periphery. Land that is largely surrounded by urban land is generally less viable economically for agricultural use compared to lands that are in wholly agricultural areas (Crawford, Multari and Starr 1995). Because of encroaching development, the agricultural value of the farmland on the project site is expected to diminish. The project site is considered prime farmland and its loss is considered to be significant. See Section 2.2, Agricultural Resources, in this SEIR for further discussion.

f. If development occurs at the project site, the City of Gilroy would provide most direct services. There are no special districts expected to provide services to the project site.

g. The proposed amendment is subject to the analysis of this SEIR. The proposed project would result in the conversion of prime agricultural land to non-agricultural uses and significant cumulative air quality impacts. These impacts are considered significant and unavoidable impact, with development of the project site. Other

potential impacts have been identified in this SEIR and mitigation measures are presented to reduce those impacts to a less than significant level.

h/i. According to Table 6 Santa Clara County Fiscal Impact of the *Fiscal Impact Analysis for the Barberi Urban Service Area Amendment*, the proposed project would cost the County more than $14,000 in net service costs at the base year and $17,562 in ten years. The County is likely to provide library, health, and other services to the new residences. A fiscal analysis was prepared for the proposed project by Applied Development Economics in July 2005. The fiscal analysis is included in Appendix B.

Urban Service Area Amendment Policy 4

> When a city with a substantial supply of vacant land within its Urban Service Area applies for an Urban Service Area expansion, LAFCO will require an explanation of why the expansion is necessary, and how an orderly, efficient growth pattern, consistent with LAFCO mandates, will be maintained.

Discussion. The City conducted a residential vacant land analysis in conjunction with the USA amendment application in January 2005. The vacant land analysis is included in Appendix C of this SEIR. The vacant land analysis concluded that the City's total residential supply (for all densities combined) was 11 years. The City had a 7.5-year supply of land designated as Neighborhood District (4.8 years within the proposed Glen Loma Specific Plan area and 2.7 years elsewhere within the urban service area). The Hecker Pass Specific Plan contains 1.5 years of residential land, mostly at lower densities. Elsewhere within the urban services area, the City has less than half a year each of low density, rural density, and hillside residential land. The Gilroy general plan directs the development of medium and high density, and a mix of other densities, within lands designated Neighborhood District. The City no longer designates lands under the medium and high-density designations outside the existing urban service area. The applicant has indicated his intent to provide medium and high-density residential areas at the project site, which is designated Neighborhood District.

Urban Service Area Amendment Policy 5

> The Commission will discourage Urban Service Area expansions, which include agricultural or other open space land unless the city has accomplished one of the following:
>
> a. Demonstrated to LAFCO that effective measures have been adopted for protecting the open space status of the land. Such measures may include, but not be limited to, establishment of agricultural preserves pursuant to the California Land Conservation Act; adoption of

City/County use agreements or applicable specific plans; implementation of clustering or transfer-of-development-rights policies; evidence of public acquisition; or

b. Demonstrated to LAFCO that conversion of such lands to other than open space uses is necessary to promote the planned, orderly, efficient development of the city.

Discussion. The project site would be pre zoned Neighborhood District, consistent with the general plan land use designation for the project site. A small portion of the project site is developed with a propane gas facility. The project site is outside of the area considered by the *South County Agricultural Preserve Study*, and is adjacent to existing development on three sides. The *South County Agricultural Preservation Study* was a joint effort of Santa Clara County, the City of Gilroy, and Santa Clara County LAFCO. The study established an area of approximately 15,800 acres to the east and south of Gilroy as an agricultural preserve. The proposed project is located outside of the agricultural preserve on land that is within the City of Gilroy's 20-year growth area. The City of Gilroy established an Agricultural Preservation Policy, which would apply to development of the project site.

Urban Service Area Amendment Policy 6

The Commission will consider whether an Urban Service Area amendment, leading to the conversion of agricultural or other open space land, will adversely affect the open space resources of the County. Factors to be studied include, but are not limited to:

a. The agricultural significance of the amendment area relative to other agricultural lands in the region (soil, climate, water-related problems, parcel size, current land use, crop value, Williamson Act contracts, etc.);

b. The economic viability of use of the land for agriculture;

c. Whether public facilities, such as roads, would be extended through or adjacent to other agricultural lands in order to provide services to anticipated development in the amendment area; and

d. Whether the amendment area is adjacent to or surrounded by existing urban or residential development.

Discussion. Each of these factors is discussed below.

a. The Land Evaluation and Site Assessment (LESA) done for this project indicated the development would have a significant unavoidable impact due to the conversion of prime farmland on the project site. However, the project site is located outside of the South County Agricultural Preserve discussed above in the section on Policy 5.

c. Public facilities and roads would not be extended through other agricultural lands to service the proposed project. The proposed project directly abuts the urban service area and public services would be extended from these urban uses to serve the project site.

b/d. The parcels north of the project site are within the city limits, and developed with houses. Parcels east of the project site, on the east side of Monterey Road from U.S. Highway 101 to Luchessa Avenue, are designated highway commercial, and developed with hotels and other visitor services. The land immediately south is the developing sports park, the first phase of which is currently under construction. The Uvas Creek bicycle trail is being extended along the eastern side of Uvas Creek, from its current terminus at Luchessa Avenue to the Sports Park. The project site will soon be adjacent to non-agricultural developed uses on its entire periphery. Land that is largely surrounded by urban land is generally less viable economically for agricultural use compared to lands that are in wholly agricultural areas (Crawford, Multari and Starr 1995).

Urban Service Area Amendment Policy 7

> Where appropriate, LAFCO will consider adopted policies advocating maintenance of greenbelts or other open space around cities in reviewing Urban Service Area amendments.

Discussion. The *South County Agricultural Preservation Study* was a joint effort of Santa Clara County, the City of Gilroy, and Santa Clara County LAFCO. The study established an area of approximately 15,800 acres to the east and south of Gilroy as an agricultural preserve. The proposed project is located outside of the agricultural preserve on land that is within the City of Gilroy's 20-year growth area. The City of Gilroy adopted its Agricultural Mitigation Policy on May 3, 2004. Preferred Preservation Areas are defined as agricultural lands located in the Santa Clara County agricultural preserve, specifically the agricultural lands located outside of Gilroy's General Plan boundary and within Gilroy's sphere of influence. The project site is not within the preferred preservation area.

Bay Area Air Quality Management District (BAAQMD) 2000 Clean Air Plan

The most recent Clean Air Plan (CAP) published by the BAAQMD is the *Bay Area 2000 Clean Air Plan and Triennial Assessment*. The CAP is a mandated requirement of the California Clean Air Act for areas that do not comply with pollutant thresholds.

The City of Gilroy is located within the San Francisco Bay Area Air Basin, which has a state and federal designation of non-attainment for ozone, and a state designation of non-attainment for particulate matter (PM_{10}). Because the growth assumptions of the *Gilroy 2002-2020 General Plan* are higher than those used in development of the air quality plan, the *Gilroy 2002-2020 General Plan* is not consistent with the air quality plan. Since the project is consistent with the *Gilroy 2002-2020 General Plan*, and the City's general plan is *inconsistent* with the CAP, the proposed project is also inconsistent with the CAP. Mitigation presented in Section 2.2, Air Quality, of this EIR, would ensure that the proposed project would include adequate neighborhood serving commercial areas to reduce air quality impacts.

Discussion. The project is consistent with the development densities established in the Gilroy general plan but is inconsistent with the CAP, because the general plan is inconsistent with the CAP.

Valley Transportation Authority Congestion Management Plan

The Santa Clara Valley Transportation Authority (VTA) is the designated Congestion Management Authority (CMA) for the County of Santa Clara. California's Congestion Management Program (CMP) legislation requires that all CMAs develop programs for evaluating the transportation impacts of land use decisions. The CMP instructs member agencies to prepare a Transportation Impact Analysis for proposed projects that are expected to result in 100 or more peak hour vehicle trips.

Discussion. Fehr & Peers Associates, Inc. has prepared a traffic study for the proposed project according to VTA guidelines. The traffic study results are summarized in Section 2.6, Transportation/Traffic. The study describes potential impacts and mitigation of those impacts needed to ensure the proposed project is consistent with the CMA. The proposed project would not result in significant traffic impacts at the studied intersections or freeway segments.

Valley Transportation Plan (VTP) 2030

VTP 2030 is a plan intended to provide a planning framework for developing and delivering transportation projects and programs over 25 years (2005 to 2030). It outlines the programs and projects the VTA Board would like to see implemented within the timeframe of the plan, and for which the VTA Board may want to pursue state and/or federal funds. VTP 2030 identifies existing and future transportation-related needs, considers all travel modes, links land use and transportation planning and decision-

making, and identifies what can be accomplished with the projected available funding for projects and programs. VTP 2030 does not include schedules for project implementation and does not make assumptions regarding financing costs that may be needed to implement specific projects in specific years.

VTP 2030 provides a framework for making key transportation decisions, a plan for investing in our transportation system, and strategic direction for VTA's involvement in land use and other livability issues, including: transit, bicycles livable communities and pedestrians.

Discussion: The proposed project implements the City's Neighborhood District land use designation by providing a variety of residential uses and integrated commercial opportunities. This direction from the general plan encourages alternate forms of transportation and development of "livable" communities, and may achieve some of the goals of VTA 2030.

1.5 SEIR Uses and Approvals

As mandated by CEQA Guidelines section 15124(d), this section contains a list of agencies that are expected to use the SEIR in their decision-making, and a list of the approvals for which the SEIR will be used. These lists include information that is known to the lead agency.

Local Agencies

- City of Gilroy (Lead Agency)
  - ◊ Urban Service Amendment Request 04-02
  - ◊ Annexation
  - ◊ Pre-Zoning
  - ◊ Subdivision Map(s)
  - ◊ Architectural and Site Review(s)

Regional Agencies

- Santa Clara County Local Agency Formation Commission
  - ◊ Urban Service Area Amendment
- Santa Clara Valley Water District
  - ◊ Development Permit for construction within 50 feet of a district facility

State Agencies

- Regional Water Quality Control Board
  - ◊ National Pollutant Discharge Elimination System (NPDES) Permit

Federal Agencies

- United States Army Corps of Engineers
  - ◊ Section 404 Clean Water Act Permit (Potentially)

1.6 Terminology Used in the SEIR

Characterization of Impacts

This SEIR uses the following terminology to denote the significance of environmental impacts:

- "No impact" means that no change from existing conditions is expected to occur;
- A "less than significant impact" would cause no substantial adverse change in the physical environment, and no mitigation is recommended;
- A "significant impact" or "potentially significant impact" would, or would potentially, cause a substantial adverse change in the physical environment, and mitigation is required; and
- A "significant and unavoidable impact" would cause a substantial change in the physical environment and cannot be avoided if the project is implemented; mitigation may be recommended, but will not reduce the impact to less than significant levels.

Abbreviations and Acronyms

APN - Assessor's parcel number

BAAQMD - Bay Area Air Quality Management District

CAP - Clean Air Plan

CEQA - California Environmental Quality Act

CMA - Congestion Management Authority

CMP - Congestion Management Program

EIR – Environmental Impact Report

LAFCO – Local Agency Formation Commission

NOP - Notice of Preparation

NPDES - National Pollutant Discharge Elimination System

SEIR – Subsequent Environmental Impact Report

USA-Urban Service Area

VTA - Santa Clara Valley Transportation Authority

2.0 Environmental Setting, Impacts and Mitigation Measures

This section presents thresholds of significance, applicable policies and regulatory issues, the existing environmental setting, an analysis of the proposed project's effects, and recommended mitigation measures to reduce significant effects to a less than significant level if feasible. Each environmental impact is characterized as no impact, a beneficial impact, a less than significant impact, a significant impact, or a significant and unavoidable impact.

2.1 Agricultural Resources

Thresholds of Significance

- Convert prime farmland or farmland of statewide importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to an urban use (projects requiring a legislative act, such as zoning changes, annexation to the City, urban service area amendments, etc). A significant effect is defined as follows:

    ◊ Project site is 10 acres or greater of prime farmland, or 40 acres or greater of farmland of statewide importance, and has a LESA model score in the significant range;

- Conflict with a Williamson Act contract.

- Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of farmland, to non-agricultural use.

Policy and Regulatory Issues

Farmland Protection Programs

Joint County-City Programs. In order to maintain the long term viability of agriculture, a multi-jurisdictional approach between the County of Santa Clara and local agencies has been established to preserve agricultural land. This approach led to the *South County Agricultural Preserve Study* a joint report prepared by the County of Santa Clara, the City of Gilroy, and the Santa Clara County Local Agency Formation Commission (LAFCO). Through the establishment of agricultural buffers, right to farm ordinances,

land trusts, conservation easements, and directed growth within the City of Gilroy 20 year growth boundary, rapid urbanization of prime agricultural land is reduced.

City Agricultural Mitigation Policy. Gilroy has long been a center for agricultural production and industry. In recent years, agriculturally based tourism has become important to the City's economy. To protect both the production and related industry, the city adopted an Agricultural Mitigation Policy on May 3, 2004 to identify methods to enable the continued viability of agriculture and agri-tourism in the Gilroy area. Several criteria are used to assess if a parcel designated for agriculture is subject to the Agricultural Mitigation Policy. If the answer to both of the following questions is affirmative, a project must comply with the Agricultural Mitigation Policy:

- Is the site designated as farmland that is either Prime Farmland or Farmland of Statewide Importance according to the State Department of Conservation Important Farmland Mapping Program?

- Does the site score as significant based on the California Department of Conservation Agricultural Land Evaluation and Site Assessment (LESA Model)?

If a project site is designated Prime Farmland and has a significant impact per the LESA model, it is subject to the Agricultural Mitigation Policy. The LESA model is described later in this section. Per Section 1.02 Agricultural Mitigation Requirements of the Agricultural Mitigation Policy, mitigation of significant agricultural impacts can be accomplished with one of three options:

- Mitigation 1: Purchase an equal amount of land (1:1 ratio) of agricultural land within the "Preferred Areas" and the transfer of ownership of this land to the Open Space Authority or other City-approved agency.

- Mitigation 2: Purchase of development rights to a 1:1 ratio on agricultural land within the "Preferred Areas" and the transfer of ownership of these rights to the Open Space Authority or other City-approved agency. The purchase value of this agricultural conservation easement will be based upon the appraisal of purchasing development rights and not fee-title rights.

- Mitigation 3: Payment of an in-lieu fee will be based upon the lowest appraisal of purchasing development rights in the "Preferred Areas."

Other Programs. There are several other means available to protect farmlands, including conservation easements, transfers of development rights, and inclusion within land trusts. One of the most common ways to preserve agricultural land is through the placement of Williamson Act contracts on parcels. None of these is applicable to the project site, although some parcels within one-quarter mile of the project site are under Williamson Act contracts.

Gilroy 2002-2020 General Plan Policy

> **Policy 1.01 Pattern of Development.** Ensure an orderly, contiguous pattern of development that prioritizes infill development, phases new development, encourages compactness and efficiency, preserves surrounding open spaces and agricultural resources and avoids land use incompatibles.

Environmental Setting

Project Site Agricultural Use

The Santa Clara Valley has historically grown a variety of crops, including vegetables, fruits, nuts, grains, floral, and nursery crops. According to the *Gilroy USA Amendment 98-03 Subsequent EIR,* the land has been used primarily for cultivation of row crops. Two small portions of the project site are not used for agriculture: the northwest corner, which is an old home site, and the northeast corner, which is a propane sales facility.

Farmland Value Assessment Methods

South County Agricultural Preserve Study. According to Figure 8 in the *South County Agricultural Preserve Study*, the project site is outside the area considered by that study. The study considered primarily land to the east of U.S. Highway 101.

Soil Characteristics. Understanding the soils that comprise the project site provides insight as to the quality of the project site for agricultural production. This section describes the two main components of soil suitability, Land Capability Classification and the Storie Index Rating, and presents a list of the soil types with corresponding classifications and ratings, which are used in the LESA analysis to determine the level of significance of agricultural loss. The entire project site is comprised of Yolo Loam.

The Yolo series consists of well-drained loams that are underlain by allivium from sedimentary rock. These slopes are on alluvial plains and fans and have slopes of zero to two percent. The vegetation, where these soils are not cultivated, is mainly annual grasses and forbs and there are a few scattered oak trees. Yolo soils are associated with Campbell, Esparto, and Zamara soils. The surface layer is grayish-brown, neutral, and mildly alkaline loam about 29 inches thick. The substratum is brown, mildly alkaline silt loam to a depth of 60 inches or more. In some places, the surface layer is silty clay loam. The characteristics of Yolo Loam are summarized in Table 3, Project Site Soil Classifications.

TABLE 3

Project Site Soil Classifications

Type	Soil Name	Acres	Storie Index	Capability Classification	LCC Rating
YaA	Yolo Loam 0-2 percent	27.7	100	I-1	100

Note: This table presents acreages, LCC, and Storie index ratings identified in the LESA analysis.

Source: Soil Survey of Eastern Santa Clara Area

Land Capability Classification (LCC). The United States Department of Agriculture (USDA) Natural Resource Conservation Service classifies each soil type in a land capability classification. The LCC indicates the suitability of soils for most kinds of crops. Groupings are made according to the limitations of the soils when used to grow crops and the risk of damage to soils when they are used in agriculture. Soils are rated from Class I to Class VIII, with soils having the fewest limitations receive the highest rating (Class I). Specific subclasses are also utilized to further characterize soils. The land capability classification shows, in a general way, the soils suitability for most kinds of farming.

Storie Index Rating. The USDA Natural Resources Conservation Service uses the Storie index rating system to numerically express (from 0, lowest, to 100, highest) the relative degree of suitability and value of a soil map unit for general intensive farming purposes. The rating is based on soil profile characteristics; texture of the surface horizon; slope; and other conditions, such as high water table, risk of erosion, and high alkalinity.

Important Farmlands Mapping Program. Under the Farmland Mapping and Monitoring Program, pursuant to California Government Code section 65570, the California Department of Conservation, Division of Land Resource Protection publishes an important farmlands map as well as a list of soil types that qualify for determination as important farmlands.

The latest *Important Farmlands Map for Santa Clara County* (2002) provides an inventory of agricultural resources in the county. The map does not necessarily reflect general plan or zoning designations, city limit lines, changing economic or market conditions, or other land use policies, although developed areas are designated as such.

The Farmland Mapping and Monitoring Program defines Prime Farmland as land with the best combination of physical and chemical characteristics able to sustain long-term production of agricultural crops. The land must have been used for production of irrigated crops some time during the four years prior to the mapping date. Farmland of Statewide Importance is land with a good combination of physical and chemical

characteristics for agricultural production, having only minor shortcomings, such as less ability to store soil moisture, compared to prime farmland.

Land Evaluation and Site Assessment. The LESA Model was developed by the California Department of Conservation to describe a site's agricultural value. The LESA Model uses a variety of factors (soil characteristics, water availability, surrounding land uses, and farmland protection status) to arrive at a set of scores ("Land Evaluation" and "Site Assessment"). According to the California Department of Conservation, loss of Prime Farmland or Farmland of Statewide Importance with a LESA score of 80 to 100 points is considered a significant adverse impact. The loss of agricultural land with a LESA score of between 60 and 79 is considered significant if either the Land Evaluation or the Site Assessment subcategories have scores of 20 or better. The loss of agricultural land with a LESA score of between 40 and 59 is considered significant if both the Land Evaluation and the Site Assessment subcategories have scores of 20 or better.

Project Analysis

Project Site Farmland Value

A LESA Model analysis was prepared for the project site. The results of the analysis are included in Appendix D. The project site has a total LESA score of 72.5. The Land Assessment subscore is 50.0 and the Site Assessment subscore is 22.5. Therefore, the loss of agricultural land would be considered a significant impact under the LESA Model.

None of the project site parcels are in a Williamson Act contract. The *Important Farmlands Map for Santa Clara County* designates the entire project site as Prime Farmland.

Proposed Project Effects on Agricultural Land

The proposed project would result in urban development on Prime Farmland, and land assessed as having significant agricultural value under the LESA Model. As stated in CEQA Guidelines appendix G, "lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment (LESA) Model prepared by the California Department of Conservation as an optional model" in assessing impacts to agriculture and farmland. The City's Agricultural Mitigation Program requires development on land with a significant LESA score to provide mitigation as outlined in the policy.

Impacts and Mitigation Measures

Significant and Unavoidable Impact - Loss of Prime Agricultural Land. The proposed project would result in the loss of 27.7 acres of prime farmland with a LESA score that indicates agricultural land of significant value. This would be a significant and unavoidable impact. Implementation of the City's Agricultural Mitigation Policy would be required.

Mitigation Measure

1. The applicant shall negotiate with the City of Gilroy to identify one of the following mitigation measures to reduce the impact to agricultural resources:

    a) Purchase an equal amount of land (1:1 ratio) of agricultural land within the "Preferred Areas" and the transfer of ownership of this land to the Open Space Authority or other City-approved agency.

    b) Purchase of development rights to a 1:1 ratio on agricultural land within the "Preferred Areas" and the transfer of ownership of these rights to the Open Space Authority or other City-approved agency. The purchase value of this agricultural conservation easement will be based upon the appraisal of purchasing development rights and not fee-title rights.

    c) Payment of an in-lieu fee will be based upon the lowest appraisal of purchasing development rights in the "Preferred Areas."

The conversion of prime farmland to urban use is an irreversible process. With the implementation of the City Agricultural Mitigation Policy, the impact to regional agricultural resources would be reduced, but would remain significant and unavoidable. The City of Gilroy would need to adopt a statement of overriding considerations were it to approve the proposed project.

2.2 Air Quality

Thresholds of Significance

The City of Gilroy CEQA thresholds of significance states that a project may have a significant effect on the environmental if the project would:

- Conflict with the Bay Area Air Quality Management District Clean Air Plan (BAAQMD CAP).

- Violate any air quality standard or contribute substantially to an existing or projected air quality violation. BAAQMD indicates that any project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact.

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors). The impact is considered significant if a project individually has a significant air quality impact. For a project that does not individually have a significant operational air quality impact, the determination of significant cumulative impacts is based upon an

evaluation of the consistency of the project with the general plan and the general plan with the CAP.

- Expose sensitive receptors (residential areas, schools, hospitals, nursing homes) to substantial pollutant concentrations (CO and PM_{10}). The impact is considered significant if the project or affected intersection is located in the immediate vicinity of a sensitive receptor and CO and PM_{10} impacts were determined to be significant.

- Create objectionable odors affecting a substantial number of people. The impact is considered significant if the project has the potential to frequently expose members of the public to objectionable odors.

Policy and Regulatory Issues

Air Quality Standards

Federal Air Quality Standards. Ambient air quality is described in terms of compliance with State and national standards. The CAA, which was last amended in 1990, requires the EPA to set National Ambient Air Quality Standards for pollutants considered harmful to public health and the environment. The CAA established two types of national air quality standards. Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings (EPA 2001).

State Air Quality Standards. The California Clean Air Act of 1988 (CCAA) has established standards that are more stringent than the federal standards. The state standards are not to be equaled or exceeded. When standards are exceeded, an "attainment plan" must be prepared which outlines how an air quality district would comply. Generally, these plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods. California also grants air districts explicit statutory authority to adopt indirect source regulations and transportation control measures, including measures to encourage or require the use of ridesharing, flexible work hours, or other measures that reduce the number or length of vehicle trips. Table 4, Federal and State Ambient Air Quality Standards, indicates both federal and State ambient air quality standards for criteria air pollutants. The BAAQMD is the agency primarily responsible for assuring that federal and state ambient air quality standards are attained and maintained in the San Francisco Bay Air Basin.

TABLE 4

Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[b]		National Standards[c]			
		ppm	µg/m^3	Primary[d]		Secondary[e]	
				ppm	µg/m^3	ppm	µg/m^3
Ozone	1 hour	0.09	180	N/A	N/A	N/A	N/A
	8 hours			0.08		0.08	
Carbon Monoxide	8 hours	9.0	10,000	9.0	10,000	9.0	10,000
	1 hour	20.0	23,000	35.0	40,000	35.0	40,000
Nitrogen Dioxide	Annual			0.053	100	0.053	100
	1 hour	0.25	470				
Sulfur Dioxide[f]	Annual			0.03	80		
	24 hours	0.04	105	0.14	365		
	3 hours					0.5	1,300
	1 hour	0.25	655				
PM_{10}[g]	Annual		20		50		50
	24 hours		50		150		150
$PM_{2.5}$[g]	Annual		12		15		15
	24 hours				65		65
Lead[g]	Calendar quarter				1.5		1.5
	30-day avg.		1.5				
Sulfate[g]	24 hours		25				
Hydrogen Sulfide	1 hour	0.03	42				
Vinyl Chloride	24 hours	0.010	26				
Visibility Reducing Particles	8 hours (10 a.m.-6 p.m.)	In sufficient amounts to reduce prevailing visibility 59 <10 miles when relative humidity is <70% w/ equivalent instrument method					

a Standards first promulgated in ppm concentrations except where noted. Equivalent µg/m3 concentrations based on reference temperature of 25ºC and reference pressure of 760 mm of mercury.

b California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide, nitrogen dioxide, PM10, and visibility reducing particles are values not to be exceeded.

c National standards, other than ozone and those based on annual averages, are not to be exceeded more than once a year.

d Designed to protect human health with an adequate margin of safety.
e Designed to protect public welfare (i.e., prevent damage to vegetation, property, visibility).
f Federal standards first promulgated in µg/m3.
g Standards promulgated in µg/m3 only
ppm = parts per million per volume
µg/m3 = micrograms per cubic meter

Source: California Air Resources Board

Existing Attainment Status

The California Air Resources Board (CARB) is the state agency required to designate areas of the state as "attainment," "nonattainment," or "unclassified" for any state standard. An attainment designation for an area signifies that pollutant concentrations do not violate the standard for that pollutant in that area. A nonattainment designation indicates that a pollutant concentration violated the standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. An unclassified designation signifies that data does not support either an attainment or nonattainment status. CARB divides air basins into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category. Table 5, San Francisco Bay Area Air Basin Attainment Status Designations, illustrates the attainment status designations for the air basin.

TABLE 5

San Francisco Bay Area Air Basin Attainment Status Designations

State Designation	Pollutant	Federal Designation
Moderate Nonattainment	Ozone	Moderate Nonattainment
Attainment	Carbon Monoxide	Attainment
Non-attainment	Particulate Matter (PM_{10}) (24-hour)	Unclassified
Attainment	Nitrogen Dioxide	Attainment
Attainment	Sulfates	--------
Attainment	Sulfur Dioxide	Attainment
Unclassified	Hydrogen Sulfide	-------

Source: BAAQMD 2005

The BAAQMD is the regional agency responsible for planning, implementing, and enforcing federal and state ambient air quality standards. The San Francisco Air Basin encompasses nine San Francisco Bay Area counties including: San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, Napa, Marin, Southern Sonoma, and

southwestern Solano counties. The proposed project is located within the subregion known as the Santa Clara Valley.

Based on a 1998 federal non-attainment classification for ozone the BAAQMD adopted the *1999 Ozone Attainment Plan*, which was approved in part by the EPA. Three co-lead agencies, the BAAQMD, the Metropolitan Transportation Commission, and the Association of Bay Area Governments prepared the *2001 Ozone Attainment Plan* to address EPA concerns. On June 15, 2005, the national one-hour ozone standard was revoked by the EPA (consultant conversation with Saffet Tanrikulu on August 9, 2005), but the Bay Area remains in non-attainment for the state one-hour and the federal eight-hour ozone standards. The Bay Area was designated as a marginal non-attainment area for the national eight-hour ozone standard in June of 2004.

Clean Air Plan (CAP)

The most recent Clean Air Plan (CAP) published by the BAAQMD is the *Bay Area 2000 Clean Air Plan and Triennial Assessment*. The CAP is a mandated requirement of the California Clean Air Act for areas that do not comply with pollutant thresholds.

The City of Gilroy is located within the San Francisco Bay Area Air Basin, which has state and federal non-attainment designations for ozone, and a state non-attainment designation for particulate matter (PM_{10}). Because the growth assumptions of the general plan are higher than those used in development of the air quality plan, the general plan is not consistent with the air quality plan.

Air Quality Monitoring

Ambient air quality at the project site can be inferred from air quality monitoring data obtained from nearby monitoring stations. The closest monitoring station is located on Ninth Street in Gilroy, and it only monitors for ozone. In 2002, the monitoring station reported six days where the state standard for one-hour ozone was exceeded and two days where the state and national eight-hour ozone standard was exceeded. In 2003, the state one-hour ozone standard was exceeded six times and the state and national eight-hour ozone standard was exceeded twice. The nearest PM_{10} monitoring station is at Tully Road in San Jose, approximately 20 miles north of the project site. This monitoring station measured four exceedence days in 2002 and two exceedence days in 2003 for PM_{10}. No exceedences for all criteria pollutants occurred in 2004 at any Santa Clara County monitoring stations.

Environmental Setting

Regional Topography and Climate

The Santa Clara Valley is bounded by San Francisco Bay to the north and by mountains to the east, south, and west. Temperatures are warm on summer days and cool on summer nights, and winter temperatures are mild. At the northern end of the valley,

mean maximum temperatures are in the low-90's during the summer and the high-50's during the winter. The mean minimum temperature ranges from the high-50's in the summer to the low-40's in the winter. The project site is further inland, where the moderating effect of the bay is not as strong and temperature extremes are greater. For example, in San Martin, located approximately two and one-half miles north of Gilroy, temperatures can be more than ten degrees warmer on summer afternoons and more than ten degrees cooler on winter nights when compared to the San Francisco Bay.

Winds in the valley are greatly influenced by the terrain, resulting in a prevailing flow that roughly parallels the valley's northwest-southeast axis. A north-northwesterly sea breeze flows through the valley during the afternoon and early evening, and a light south-southeasterly drainage flow occurs during the late evening and early morning. In the summer, the southern end of the valley, including Gilroy, sometimes becomes a "convergence zone," when air flowing from the Monterey Bay gets channeled northward into the southern end of the valley and meets with the prevailing north-northwesterly winds.

Wind speeds are greatest in the spring and summer and weakest in the fall and winter. Nighttime and early morning hours frequently have calm winds in all seasons, while summer afternoons and evenings are quite breezy. Strong winds are rare, associated mostly with the occasional winter storm.

Regional Air Quality

The air pollution potential of the Santa Clara Valley is high. High summer temperatures, stable air and mountains surrounding the valley combine to promote ozone formation. In addition to the many local sources of pollution, ozone precursors from San Francisco, San Mateo, and Alameda counties, are carried by prevailing winds in the Santa Clara Valley. The valley tends to channel pollutants to the southeast. In addition, on summer days with low-level inversions, ozone can be recirculated by southerly drainage flows in the late evening and early morning and by the prevailing northwesterly in the afternoon. A similar recirculation pattern occurs in the winter, affecting levels of carbon monoxide and particulate matter. This movement of the air up and down the valley increases the impact of the pollutants significantly.

Pollution sources are plentiful and complex in the Santa Clara Valley. There is a high concentration of industry at the northern end in the Silicon Valley. Some of these industries are sources of air toxins as well as criteria pollutants. In addition, Santa Clara Valley's large population and many work-site destinations result in the highest generation of mobile source emissions of any sub-region in the Bay Area.

Air Pollutants of Concern

The most common and widespread air pollutants of concern include ozone, carbon monoxide, nitrogen oxides, particulate matter, reactive organic gases, sulfur dioxide, and lead. The common properties, sources, and related health and environmental effects are summarized in Table 6, Common Air Pollutants.

TABLE 6

Common Air Pollutants

Pollutant	Properties	Major Sources	Related Health & Environmental Effects
Ozone (O_3)	Ground level ozone is created by the chemical reaction between oxides of nitrogen (NO_x) and volatile organic compounds (VOC) in the presence of heat and sunlight. Ground level ozone is the principal component of smog.	• Motor vehicle exhaust, • Industrial emissions, • Gasoline vapors, and • Chemical solvents.	• Irritation of lung airways and inflammation, • Aggravated asthma, • Reduced lung capacity, and • Increased susceptibility to respiratory illnesses (i.e. bronchitis).
Suspended Particulate Matter (PM_{10})	Suspended particulate matter is a term used to describe particles in the air, including dust, soot, smoke, and liquid droplets. Others are so small that they can only be detected with an electron microscope.	• Motor vehicles, • Factories, • Construction sites, • Tilled Agricultural fields, • Unpaved roads, and • Burning of Wood.	• Aggravated asthma, • Increases in respiratory symptoms, • Decreased lung function; • Premature death, • Reduced visibility.
Carbon Monoxide (CO)	Carbon Monoxide is a colorless, odorless gas that is formed when carbon in fuel is not burned completely	• Fuel combustion; • Industrial processes, • Areas of high traffic density during peak hour traffic (localized sources of concern)	• Chest pain for those that suffer from heart disease, • Vision problems, • Reduced mental alertness, • Death (at high levels)
Nitrogen Oxides	Generic form for a group of highly organic gases, all of which contain nitrogen in varying amounts. Many of the nitrogen oxides are odorless and colorless.	• Motor vehicles, • Electric utilities, and • Industrial, commercial, and residential sources that burn fuel.	• Toxic to plants, • Reduce visibility, and • Respiratory irritant.

Sulfur Dioxides (SO_x)	Sulfur oxide gases are formed when fuel containing sulfur such as coal and oil is burned and when gasoline is extracted from oil or metals are extracted from ore.	• Electric utilities (especially those that burn coal), and • Industrial facilities that derive their products from raw materials to produce process heat.	• Respiratory illness, particularly in children and the elderly, and • Aggravates existing heart and lung diseases.
Reactive Organic Gases (ROG)	Precursor of ground-level ozone.	• Petroleum transfer and storage, • Mobile sources, and • Organic solvent use.	• Potential carcinogen (e.g. benzene), and • Toxic to plants and animals.

Source: BAAQMD and EPA

Sensitive Receptors

Although air pollution can affect all segments of the population, certain groups are more susceptible to its adverse effects than others. Children, the elderly, and the chronically or acutely ill are the most sensitive population groups. These sensitive receptors are commonly associated with various types of land uses. The nearest residences are located immediately north of Luchessa Avenue.

Project Analysis

Air Plan Consistency

The general plan is inconsistent with the CAP because it provides for greater population growth than projected by the Association of Bay Area Governments (ABAG). ABAG projections are based on an average annual growth rate of 2.3 percent. The population projections used by the City of Gilroy are based on historic growth and Residential Development Ordinance growth of approximately 345 new housing units per year, which equates to a 2.3 to 2.6 percent growth. The slower ABAG-projected growth isn't assumed under the City of Gilroy projections until after 2010. Because the proposed project is consistent with the general plan, the proposed project would likewise be inconsistent with the CAP.

Construction Emissions

Emissions generated during construction are "short term" in the sense that they would be limited to the actual periods of site development and construction. Short-term construction emissions are typically generated by the use of heavy equipment, the transport of materials, and construction employee commute trips. Construction-related

emissions consist primarily of reactive organic gases (ROG), oxides of nitrogen (NO_x), fugitive dust (PM_{10}), and carbon monoxide (CO). Emissions of ROG, NO_x, and CO are generated primarily by the operation of gas and diesel-powered motor vehicles, asphalt paving activities, and the application of architectural coatings. Emissions of PM_{10} are generated primarily by wind erosion of exposed graded surfaces.

Construction-generated emissions vary substantially from day to day depending on the level of activity, the specific construction equipment used, and weather conditions. Construction-related emissions can cause a substantial increase in localized concentrations of PM_{10}, for which the BAAQMD is currently in nonattainment. Particulate emissions from construction activities can lead to adverse health effects, as well as nuisance concerns such as reduced visibility and soiling of exposed surfaces. The BAAQMD approach to CEQA analyses for construction impacts is to emphasize implementation of effective and comprehensive control measures rather than detailed quantification of emissions (BAAQMD 1999).

Diesel Emissions

Diesel exhaust is produced when an engine burns diesel fuel. It is a complex mixture of thousands of gases and fine particles that contain more than 40 toxic air containments. During construction diesel powered trucks and equipment would be transporting materials to and operating on the project site. These trucks and equipment could remain idle for periods, increasing emissions into the air. Diesel emissions could continue throughout the operation of the proposed project, with diesel trucks potentially transporting products to or from the proposed commercial use; however, the commercial area is small and many of the trucks serving the site would be gasoline fueled. There would be more diesel-powered trucks during construction than operations. Therefore, sensitive receptors near the project site would be most likely to be exposed to significant quantities of diesel exhaust during construction.

Odor and Toxic Emission Sources

The proposed project would not include uses that would generate noticeable sources of odors, or other toxic chemicals that could be a nuisance or danger to sensitive receptors.

Operational Emissions

Operational emissions occur after construction is completed and structures are occupied. They are considered long term emissions because they continue indefinitely. The principal source of long-term emissions would be automobiles and trucks driving to and from the proposed project. At build out, the proposed project would add an estimated 4,707 daily trips, 223 AM peak hour trips (72 inbound/151 outbound) and 403 PM peak hour factor trips (230 inbound/173 outbound).

URBMEIS modeling was conducted to estimate project operational emissions. The URBEMIS modeling results are summarized in Table 7, URBEMIS Operational Modeling Results (Pounds Per Day) and the complete results are presented in

Appendix E. The proposed project would not result in emissions in excess of BAAQMD standards.

TABLE 7

URBEMIS Operational Modeling Results (Pounds Per Day)

	ROG	NOx	PM_{10}	CO
Summer (Unmitigated)	33.42	34.27	33.547	354.17
Summer (mitigated)	32.26	32.95	32.25	340.56
Winter (unmitigated)	38.92	51.42	33.54	408.20
Winter (mitigated)	37.42	49.45	32.25	392.52
BAAQMD Thresholds	80	80	80	----

Source: BAAQMD and EMC Planning Group Inc.

Impacts and Mitigation Measures

Potentially Significant Impact – Construction Emissions. Sensitive receptors could be exposed to construction emissions, including diesel, during construction. Implementation of the following mitigation measures would reduce these impacts to a less than significant level.

Mitigation Measures

2. During construction all diesel-powered engines shall be required to have particle trapping filters to reduce the amount of polluting emissions. Construction delivery trucks shall not idle for longer than two minutes.

3. The following measures shall be incorporated into all project plans, subject to the review and approval of the City of Gilroy Engineering Division:

   a. The idling time for construction equipment shall not exceed two minutes;

   b. Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use;

   c. All equipment shall be properly tuned and maintained in accordance with the manufacturer's specifications;

d. When feasible, alternative fueled or electrical construction equipment shall be used at the project site;

e. Use the minimum practical engine size for construction equipment; and

f. Gasoline-powered equipment shall be equipped with catalytic converters, where feasible.

Potentially Significant Impact – Construction Dust. Sensitive receptors could be exposed to dust (PM_{10}) from grading operations and other soil disturbance during construction. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

4. The following dust control measures shall be incorporated into all permits for the proposed project, subject to the review and approval of the City of Gilroy Engineering Division:

   a. Water all active construction areas at least twice daily;

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

   c. 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;

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

   e. Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.

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

   g. Limit traffic speeds on unpaved roads to 15 mph

   h. Install sandbags or other erosion control measures to prevent silt runoff to public roadways.

   i. Replant vegetation in disturbed areas as quickly as possible.

   j. Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.

Less Than Significant Impact - Operational Air Emissions. The proposed project would not result in operational air emissions that exceed the BAAQMD air quality thresholds. However, when the project is designed, recommendations from the BAAQMD to encourage alternative forms of transportation, should be considered. No mitigation measures are necessary.

2.3 Biological Resources

The biological resources section is based on a site visit performed by Janet Ilse, Biologist, with EMC Planning Group Inc. on April 26, 2005. The following technical documents were also reviewed to determine potential biological resources occurring on the project site: *California Natural Diversity Data Base* (CNDDB), *Gilroy and Chittenden Quadrangles* (California Department of Fish and Game 2005), *The California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California* (California Native Plant Society 2001), and special plants and animals lists from the California Department of Fish and Game (California Department of Fish and Game 2005).

Thresholds of Significance

The City of Gilroy CEQA thresholds of significance states that a project may have a significant effect on the environmental 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, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. A substantial adverse effect is defined as follows:

  ◊ Project has the potential to result in a "taking" of a species listed, or proposed for listing, or a candidate for listing under the state and/or federal Endangered Species Act, or protected by the Migratory Bird Treaty Act, or otherwise considered to have a special status in local plans, or to substantially modify the habitat for such species.

  There are many areas in the City where disruption would not create a significant impact on special-status species or other biological resources. Examples of areas where impacts are presumed to be insignificant include:

  - small acreages (i.e., less than five acres) of non-native grassland if wildlife values are low (i.e., potential burrowing owl habitat is absent);
  - individuals or stands of non-native trees if not used by important animal species, such as raptors or other nesting migratory birds;
  - areas of historical disturbance, such as intensive agriculture;

- small pockets of habitats already significantly fragmented or isolated, and degraded or disturbed; and
- areas of primarily ruderal vegetation resulting from pre-existing man-made disturbance.

- The project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. A substantial adverse effect is defined as follows:

  The project has the potential to adversely affect riparian habitat in the following ways:

  ◊ direct removal of riparian vegetation;

  ◊ disruption of riparian wildlife habitat, particularly animal dispersal corridors and/or understory vegetation;

  ◊ intrusion within the upland edge of the riparian canopy (generally within 50 feet in urbanized areas and within 100 feet in rural areas and along major rivers), leading to potential disruption or animal migration, breeding, etc. through increased noise, light and glare, and human and domestic animal intrusion;

  ◊ disruption of a substantial amount of adjacent upland vegetation where such vegetation plays a critical role in supporting riparian-dependent wildlife species (i.e., amphibians), or where such vegetation aids in stabilizing steep slopes adjacent to the riparian corridor, which reduces erosion and sedimentation potential;

  ◊ construction activity that disrupts critical time periods (nesting, breeding) for fish and other wildlife species;

  The project has the potential to adversely affect native grassland habitat in the following ways:

  ◊ Removal or severe disturbance to native grassland, 1/4 acre or greater, would be considered significant. Removal or severe disturbance to a patch or patches of native grassland less than 1/4 acre, which are not clearly isolated and are a part of a significant native grassland or an integral component of a larger ecosystem, would also be considered significant;

  The project has the potential to adversely affect oak woodland habitat in the following ways:

  ◊ Project-related impacts may be considered significant due to changes in habitat value and species composition, such as habitat fragmentation, removal

of understory, alteration to drainage patterns, disruption of the canopy, and/or removal of a significant number of trees that would cause a break in the canopy or disruption in animal movement in and through the woodland.

- The project would 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, filing, hydrological interruption, or other means. A substantial adverse effect is defined as follows.

  The project has the potential to adversely affect wetlands in the following ways:

  ◊ result in a net loss of important wetland area or wetland habitat value, either through direct or indirect impacts to wetland vegetation, degradation of water quality, or threaten the continuity of wetland-dependent animal or plant species;

  ◊ substantially interrupt wildlife access, use, and dispersal in wetland areas and between contiguous habitats through riparian areas; or

  ◊ diminish hydrological conditions, such as the quantity and quality of fun-off, of wetland systems.

  Authorization from the Corps is required in order to engage in activities that fill or otherwise alter Corps-jurisdictional areas. Authorization can be obtained through the Individual Permit process for large projects, or through the Nationwide Permit (NWP) process for projects that are of a size and extent that will result in minimal impacts to jurisdictional areas. Projects that are subject to approval of an Individual Permit would have significant adverse impacts on Corps-jurisdictional areas. Projects that are subject to approval of a NWP may or may not have significant adverse impacts on Corps-jurisdictional areas. Some NWPs identify a limit to the size and extent of wetland impacts that can occur without any authorization required from the Corps (i.e., less than 1/10 acre). Projects with this level of impact would have no significant adverse impact. Alternatively, NWPs may require compensatory mitigation for impacts over a certain size and extent. Projects requiring mitigation to qualify for a NWP would result in significant impacts to Corps-jurisdictional areas. The threshold of significance is defined by regulations of Section 404 of the Clean Water Act and the NWP program.

- The project would 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. Substantial interference is defined as follows:

  Project has the potential to adversely affect wildlife movement or nursery sites in the following ways:

- ◊ reduce or eliminate species diversity or abundance;
- ◊ reduce or eliminate quantity or quality of nesting areas;
- ◊ limit reproductive capacity through losses of individuals or habitat;
- ◊ fragment, eliminate, or otherwise disrupt foraging areas and/or access to food sources;
- ◊ limit or fragment range and movement (geographic distribution or animals and/or seed dispersal routes); or
- ◊ interfere with natural processes, such as fire or flooding, upon which the habitat depends.

In general, any activities in or adjacent to defined wildlife movement corridors (i.e., riparian corridor, areas that are contiguous with adjacent open space areas, etc.) that could potentially disturb, restrict movement or activity, or facilitate increased predation of wildlife species would be considered a significant adverse impact.

- The project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (i.e., the City of Gilroy Consolidated Landscape Policy). A significant effect would be defined as removal of on-site trees considered to be significant under the City of Gilroy Consolidated Landscaping Policy, section 6.0.
- The project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan. There are currently no adopted applicable plans affecting the City of Gilroy. However, the City of Gilroy has agreed to enter into the Santa Clara County Multi Species Habitat Conservation Plan (MSHCP) to address the issue of habitat loss for special status species. The MSHCP is in the preliminary stages and is not likely to be completed until at least 2010.

The following discussion and any identified impacts are based on these thresholds. If an anticipated impact exceeds a threshold, feasible mitigation measures are presented to lessen that impact.

Regulatory Setting

Protective Policies for Plants, Animals and Habitats

Threatened and Endangered Species. Several species of plants and animals within the state of California have low populations, limited distributions, or both. Such species may be considered rare and are vulnerable to extinction as the state's human population

grows and the habitats these species occupy are converted to urban uses. State and federal laws have provided the California Department of Fish and Game (CDFG) and the U.S. Fish and Wildlife Service (USFWS) with a mechanism for conserving and protecting the diversity of plant and animal species native to California. A sizable number of native plants and animals have been formally designated as threatened or endangered under state and federal endangered species legislation. Others have been designated as candidates for such listing. Still others have been designated as species of special concern by the CDFG. The California Native Plant Society (CNPS) has developed its own set of lists of native plants considered rare, threatened or endangered (CNPS 2001).

Species listed as threatened or endangered under provisions of the state and federal endangered species acts, candidate species for such listing, state species of special concern, and some plants listed as endangered by CNPS are collectively referred to as special-status species. Permits may be required from both the CDFG and USFWS if activities associated with a proposed project will result in the "take" of a listed species. Both agencies review CEQA documents for adequacy regarding endangered species issues and to make project-specific recommendations for the conservation of special status species.

Migratory Birds. State and federal law also protect most birds. The Federal Migratory Bird Treaty Act (FMBTA: 16 U.S.C., sec. 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.

Birds of Prey. Birds of prey are protected in California under provisions of the State Fish and Game Code, Section 3503.5, 1992. This section 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. Disturbance that causes nest abandonment and/or loss of reproductive effort, such as construction during the breeding season, is considered a take by the CDFG.

Wetlands and Waters of the United States. Natural drainage channels and wetlands are considered Waters of the United States (hereafter referred to as jurisdictional waters). The U.S. Army Corps of Engineers (USACE) regulates the filling or grading of such waters by authority of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. The extent of jurisdiction within drainage channels is defined by ordinary high water marks on opposing channel banks. Wetlands are habitats with soils that are intermittently or permanently saturated, or inundated. The resulting anaerobic conditions select for plant species known as hydrophytes that show a high degree of fidelity to such soils. Wetlands are identified by the presence of hydrophytic vegetation, hydric soils (soils intermittently or permanently saturated by water), and wetland hydrology according to methodologies outlined in the 1987 Corps of Engineers Wetlands Delineation Manual (Environmental Laboratory 1987).

Activities that involve the discharge of fill into jurisdictional waters are subject to the permit requirements of the USACE. Discharge permits are typically issued on the condition that the applicant agrees to provide mitigation that results in no net loss of wetland function or value. In addition to individual discharge permits, the USACE issues nationwide permits applicable to certain activities. Nationwide Permit 43 covers storm water management facilities of up to one-half acre within non-tidal wetlands, with notification required over one-tenth acre, and a compensatory mitigation proposal required in all cases. Under the nationwide permits, discharge of fill must be minimized to the extent practicable. No discharge permit can be issued until the Regional Water Quality Control Board (RWQCB) issues a certification (or waiver of such certification) that the proposed activity will meet state water quality standards. The RWCQB is also responsible for enforcing National Pollutant Discharge Elimination System (NPDES) permits, including the General Construction Activity Storm Water Permit.

CDFG has jurisdiction over the bed and bank of natural drainages according to provisions of Section 1601 and 1603 of the California Fish and Game Code. Activities that would disturb these drainages are regulated by the CDFG via a Streambed Alteration Agreement. Such an agreement typically stipulates certain measures that will protect the habitat values of the drainage in question.

Significant Trees. The *City of Gilroy Consolidated Landscaping Policy*, section 6.0, states that the following trees shall be designated significant:

- Existing native trees (naturally occurring species in Gilroy) six (6) inches or more in diameter, at a point four and one half (4 1/2) feet above the ground; or
- Important to the historical or visual aspect of Gilroy (the hillside tree stands).

City of Gilroy General Plan Policies

The general plan includes Open Space and Habitat Areas policies (20.01 through 20.05) and implementation actions (20.A through 20.D and 20.H) designed to protect biological resources. Uses within the project area should be designed to be consistent with these policies and implementation actions.

Environmental Setting

Existing Project Site Conditions and Vegetation Communities

The project site is located south of Luchessa Road, west of Monterey Street, east of Uvas Creek, and north of a Sports Park currently under construction and owned by the City of Gilroy. The majority of the project site is in agricultural row crop production. A propane gas facility is located in the northeast corner of the project site. The northwest parcel contained a number of ornamental and fruit trees as well as what appeared to be a former house foundation. At the time of the biological field investigation, the agricultural fields had been graded for row crops, however plant sprouts were not visible. Non-native/ruderal (disturbed) grassland vegetation is present within the northeast and

northwest parcels and along the margin of the agricultural fields. Uvas Creek is present to the west of the project site, with an approximate 50-foot mown right-of-way separating the project site from the creek.

Agricultural/Horticultural. A majority of the land within the project boundary is used for the production of agricultural row crops. Due to continuous human interaction, agricultural fields and horticultural operations typically provide little habitat for native plants and wildlife. Raptors, crows, and songbirds forage in the cultivated fields and small mammals [e.g. pocket gophers (*Thomomys bottae*), voles (*Microtus* spp.), and field mice (*Peromyscus* spp.)] also forage and burrow in the fields (assuming they are not actively controlled in the area). Neither ground squirrels nor their sign (tracks and/or scat) were identified during the field investigation. Larger mammals such as foxes may also utilize cultivated fields for hunting and foraging but are not likely to inhabit these areas due to the proximity of urban development.

California Annual Grassland Series. The project site contains a variety of disturbed areas that have been affected by previous cultivation. These disturbed areas support a mixture of ruderal (weedy) species, dominated by the non-native annual grasses and forbs. Dominant vegetation observed in these areas includes wild oat (*Avena* spp.), foxtail (*Hordeum* spp.), ripgut brome (*Bromus diandrus*), field mustard (*Brassica rapa*), milk thistle (*Silybum marianum*), and redtstem filaree (*Erodium botrys*). These ruderal areas in general provide marginal wildlife habitat, but some of the more extensive open areas could support populations of lizards and small mammals, which could provide a prey base for raptors, snakes, and other predators.

Wetlands / Waters of the U.S.

Potential wetlands and waters of the U.S. were identified adjacent to the project site. Uvas Creek, the drainage corridor west of the project site, is likely to be considered jurisdictional. Therefore, impacts that would affect the bed or bank of this creek would require permits from the appropriate agency, including the ACOE and CDFG. No additional wetlands, vernal pools, or jurisdictional features were identified.

Project Site Special-Status Species

Data from the USFWS, CDFG, and CNPS, as well as the biological report and supplemental information, were reviewed to determine the potential for any special-status species to occur on the project site. Special-status species include species listed by the USFWS as threatened or endangered, USFWS candidates for listing as threatened or endangered, species designated as "Species of Concern" by USFWS, species listed by the CDFG as threatened, endangered, or designated as "Species of Special Concern," and species included on California Native Plant Society Lists 1A, 1B, 2, 3, or 4.

Special-status species initially judged to potentially occur on the project parcel are listed in Table 8, Special Status Species Initially Judged to Potentially Occur on the Project Site, along with their legal status, habitat requirements, and potential to occur on the

TABLE 8

Special-Status Species Initially Judged to Potentially Occur on the Project Site

Species	Status (Fed/State/ CNPS)	Habitat	Potential to Occur on Site
Plants			
Big-scale balsamroot *(Balsamorhiza macrolepis var. macrolepis)*	--/--/1B	Valley and foothill grassland, cismontane woodland, sometimes on serpentine, 35-1,000m elevation.	Unlikely. Ruderal grassland is present on the site, however serpentine soils are not present and the entire site is disturbed by active discing.
Legenere *(Legenere limosa)*	--/--/1B	In beds of vernal pools, 1-880m elevation.	Unlikely. Vernal pools are not present and the entire site is disturbed by active discing.
Loma Prieta hoita *(Hoita strobilina)*	--/--/1B	Chaparral, cismontane woodland, riparian woodland, serpentine, mesic sites	Unlikely. The dominant community is disturbed grassland and the entire site is disturbed by active discing.
Metcalf Canyon jewel flower *(Streptanthus albidus ssp. albidus)*	FE/--/1B	Valley and foothill grassland. Endemic to Santa Clara County. Relatively open areas in dry grassy meadows on serpentine soils, serpentine balds, 45-245m elevation.	Unlikely. Ruderal grassland is present on the site, however serpentine soils are not present and the entire site is disturbed by active discing.
Most beautiful jewel flower *(Streptanthus albidus ssp. peramoenus)*	--/--/1B	Chaparral, valley and foothill grassland, cismontane woodland, serpentine outcrops, on ridges and slopes, 120-730m elevation.	Unlikely. Ruderal grassland is present on the site, however serpentine soils are not present and the entire site is disturbed by active discing.
Santa Clara Valley dudleya *(Dudleya setchellii)*	FE/--/1B	Valley and foothill grassland, cismontane woodland. Endemic to serpentine outcrops and on rocks within grassland or woodland of Santa Clara County, 80-335m elevation.	Unlikely. Ruderal grassland is present on the site, however serpentine soils are not present and the entire site is disturbed by active discing.

Species	Status (Fed/State/ CNPS)	Habitat	Potential to Occur on Site
Showy indian clover *(Trifolium amoenum)*	FE/--/1B	Valley and foothill grassland, coastal bluff scrub. Sometimes on serpentine soil, open sunny sites, swales, 5-560m elevation.	Unlikely. Ruderal grassland is present on the site, however serpentine soils are not present and the entire site is disturbed by active discing.
Smooth lessingia *(Lessingia micradenia var. glabrata)*	--/--/1B	Chaparral, endemic to Santa Clara County. Serpentine, often on roadsides, 120-485m elevation.	Unlikely. Ruderal grassland is present on the site, however serpentine soils are not present and the entire site is disturbed by active discing.
Pink creamsacs *(Castilleja rubicundula ssp. rubicundula)*	--/--/1B	Chaparral, meadows and seeps, valley and foothill grassland. Openings in chaparral or grasslands on serpentine soils, 20-900m elevation.	Unlikely. Ruderal grassland is present on the site, however serpentine soils are not present and the entire site is disturbed by active discing.
Saline clover *(Trifolium depauperatum var. hydrophilum)*	--/--/1B	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites, 0-300m elevation	Unlikely. Vernal pools are not present and the entire site is disturbed by active discing.
Animals			
Bank swallow *(Riparia riparia)*	--/CT	(Nesting) Colonial nester, nests primarily in riparian and other lowland habitats west of the desert, requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole	Unlikely. Vertical banks/cliffs or stream habitat is not present on the site.
Bay checkerspot butterfly *(Euphydryas editha bayensis)*	FT/--	Restricted to native grasslands on outcrops of serpentine soil in the vicinity of San Francisco Bay. *Plantago erecta* is the primary host plant, *Orthocarpus densiflorus* and *O. purpurscens* are secondary host plants.	Unlikely. Ruderal grassland is present on the site, however serpentine soils are not present and the entire site is disturbed by active discing. Neither *Plantago erecta* nor the secondary host plants are present.

Species	Status (Fed/State/ CNPS)	Habitat	Potential to Occur on Site
Burrowing Owl *(Athene cunicularia)*	FSC/--	Open, dry, annual or perennial grasslands, desert or scrubland, available burrows.	Unlikely. Suitable grassland habitat and available burrows not present.
California red-legged frog *(Rana aurora draytonii)*	FT/CSC	Rivers, creeks and stock ponds with pools and overhanging vegetation (breeding habitat).	Unlikely. Although Uvas Creek occurs approximately 50 feet west of the project site, due to continuous agricultural activity and the presence of the levee between the project site and the Creek, it is unlikely this species occurs on the project site itself.
California tiger salamander *(Ambystoma californiense)*	FT/ CP	Grasslands, open oak woodlands, and seasonal pools or stock ponds in central California.	Unlikely. Although Uvas Creek occurs approximately 50 feet west of the project site, due to continuous agricultural activity and the presence of the levee between the project site and the Creek, it is unlikely this species occurs on the project site itself.
Foothill yellow-legged frog *(Rana boylii)*	--/CSC	Partly shaded, shallow streams and riffles with rocky substrate in a variety of habitats. Requires at least some cobble-sized substrate for egg-laying and 15 weeks of available water to attain metamorphosis.	Unlikely. Although Uvas Creek occurs approximately 50 feet west of the project site, due to continuous agricultural activity and the presence of the levee between the project site and the Creek, it is unlikely this species occurs on the project site itself.
Least Bell's vireo *(Vireo bellii pusillus)*	FE/CE	(Nesting) Summer resident of Southern California in low riparian habitats in the vicinity of water or in dry river bottoms (below 2,000 feet). Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, *Baccharis*, mesquite.	Unlikely. Riparian habitat found onsite significantly disturbed.

Species	Status (Fed/State/ CNPS)	Habitat	Potential to Occur on Site
Opler's longhorn moth *(Adela oplerella)*	--/--	From Marin county and the Oakland area on the inner coast ranges south to Santa Clara County. Serpentine grassland, larvae feed on (*Platystemon californicus*)	Unlikely. Ruderal grassland is present on the site, however serpentine soils are not present and the entire site is disturbed by active discing.
Steelhead *(Oncorhynchus mykiss irideus)*	FT/--	Coastal stream with spawning gravel	Unlikely. Suitable stream habitat is not present on the site.
Tricolored blackbirds *(Agelaius tricolor)*	FSC/--	Areas adjacent to open water and access to protected nesting substrate	Unlikely. Suitable habitat is not present on the site.
Western pond turtle *(Clemmys marmorata marmorata)*	--/CSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat for egg-laying.	Unlikely. Although Uvas Creek occurs approximately 50 feet west of the project site, due to continuous agricultural activity and the presence of the levee between the project site and the Creek, it is unlikely this species occurs on the project site itself.

FE: Listed as 'Endangered" by the Federal Endangered Species Act.

FT: Listed as "Threatened" by the Federal Endangered Species Act.

FC: A candidate for listing as threatened or endangered under the Federal Endangered Species Act.

FSC: United States Fish and Wildlife Service (USFWS) "Special Concern." Prior to February 1996, the USFWS identified these species as "Category 2" candidates for listing (taxa for which information in the possession of the USFWS indicated that proposing to list as endangered or threatened was possibly appropriate, but for which sufficient data on biological vulnerability and threat were not currently available to support proposed rules). The designation of Category 2 species as candidates resulted in confusion about the conservation status of these taxa. To reduce that confusion, and to clarify that the USFWS does not regard these species as candidates for listing, the USFWS has discontinued the designation of Category 2 species as candidates. The USFWS remains concerned about these species, but further biological research and field study are needed to resolve the conservation status of these taxa.

1B: Plants considered by California Native Plant Society (CNPS) to be rare, threatened, or endangered in California and elsewhere due to their limited or vulnerable habitat, their low numbers of individuals per population (even though they may be wide ranging), or their limited number of populations.

Sources: EMC 2005, CNDDB 2005

project parcel. This list was determined by evaluating the geographic ranges and habitat requirements of each species and habitat conditions at the project parcel.

Reptiles and Amphibians. Special status amphibians and reptiles, including California tiger salamander (*Ambystoma californiense*), California red-legged frog (*Rana aurora draytonii*), foothill yellow-legged frog (*Rana boylii*), and western pond turtle (*Clemmys marmorata marmorata*), potentially occur in the Uvas Creek corridor. Although these species are known to utilize adjacent upland habitats to breeding and migratory corridors, it would be highly unlikely that they would occur on the majority of the project site due to the long history of agricultural disturbance and the presence of a large barrier to migration, the Uvas Creek levee.

Raptor Nests. Riparian trees can provide nesting sites for raptors such as the red-tailed hawk (*Buteo jamaicensis*) and red-shouldered hawk (*Buteo lineatus*). Riparian trees present along Uvas Creek west of the project site have the potential to provide nesting habitat for raptors.

Water Quality Effects on Biological Resources

Water quality can affect biological resources in and adjacent to streams, lakes, wetlands and other waters. The biological effects of excess sediment include increased turbidity and reduced light penetration, leading to a reduction in the quality of bottom habitat, reduced survival of fish eggs, and declines in populations of some fish species. The biological effects of pollutants found in urban run-off are as varied as the pollutants themselves. Urban pollutants can accelerate algae and vegetation growth, lower water oxygen levels, and kill fish. The temperature of urban run-off waters is typically elevated, which can result in a variety of effects on aquatic habitat and organisms (EPA undated).

Project Analysis

No special status species were identified during the field investigation. Nesting raptors may occur in riparian trees along Uvas Creek, west of the project site. Impacts to nesting raptors would be potentially significant.

Uvas Creek is a jurisdictional water of the U.S. and provides migration and foraging habitat for a number of species in the area. Impacts to Uvas Creek would be potentially significant.

Impacts and Mitigation Measures

Potentially Significant Impact - Raptor Nests. Cottonwood and sycamore trees present near the project site have the potential to provide suitable nesting habitat for raptors. If there were active nest(s) of protected bird species present, construction and site preparation activities, if conducted during the nesting season, could result in the direct

loss of nests, including eggs and young, or the abandonment of an active nest by the adults. Implementation of the following mitigation measure would reduce the potentially significant impact to a less than significant level.

Mitigation Measure

5. Pre-construction surveys for nesting raptors shall be conducted by a qualified biologist if construction is to occur during the nesting season (April 15 – August 1) to reduce impacts to a less than significant level. If raptor nests are located during pre-construction surveys, a qualified biologist shall establish a 300-foot buffer around each nest for the duration of the breeding season (until such time as the young are fully fledged) to prevent nest harassment and brood mortality. Work may proceed prior to August 1 only if a qualified biologist conducts nest checks and establishes that the young are fully fledged. Every effort will be made to avoid removal or impact to known raptor nests within project boundaries. If trees known to support raptor nests cannot be avoided, removal of these trees will only occur during the non-breeding season to reduce impacts to a less than significant level.

Potentially Significant Impact - Waters of the U.S. Uvas Creek is located approximately 50 feet from the western boundary of the project site. There are no other rivers, streams, or ponded areas that would be considered waters of the U.S. or wetlands present on the project site. Disturbance to Uvas Creek is would be a potentially significant impact resulting from construction on the portions of the project site nearest to Uvas Creek. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

6. Prior to future development activities, a 50-foot setback from the high water mark of Uvas Creek shall be established for the protection of the water corridor. Although a majority of this corridor is likely to occur on the property owned by the Santa Clara Valley Water District, a portion of the setback may occur on the project site. Grading and equipment shall not be allowed within this setback. If disturbance is proposed within or above the creek bed, a Section 404 permit from the USACE and a Streambed Alteration Agreement from CDFG shall be obtained.

Potentially Significant Impact – Establishment of Non-native Plants. A number of invasive species listed on the California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* (CALEPC 1999) are present within the property boundaries, including milk thistle (*Silybum marianum*) and bull thistle (*Cirsium vulgare*). Grading and disturbance associated with the proposed project would remove any native plants currently growing at the project site and would also create the disturbed environment preferred by invasive species. To help provide for the establishment of native plants, and reduce potential impacts on native plans to a less than significant level, the following mitigation measure shall be implemented.

Mitigation Measure

7. In order to prevent the spread of invasive non-native species, the project proponent shall prepare a landscaping and re-vegetation plan to include the following requirements:

    a. An eradication plan for plants listed in California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* currently growing on the project site;

    b. Use of plants listed in California Exotic Plant Council's *Exotic Pest Plants of Greatest Ecological Concern in California* shall be prohibited;

    c. Exposed soil areas shall be planted, mulched, or covered between October 15 and the following April 15 each year;

    d. Plant materials used in landscaping, erosion control, or habitat restoration shall consist of plants that are included in an appropriate native California plants as identified by a qualified biologist or landscape architect; and

    e. To prevent erosion and conserve water, bare soil between newly installed plant materials shall be mulched, covered with jute netting, or seeded with a mix of seeds best suited for the climate and soil conditions, and native to the Gilroy region.

2.4 Noise

Potential long term and short term noise concerns are discussed in this section based on information obtained from the Gilroy general plan (City of Gilroy 2002), *City of Gilroy General Plan EIR* (City of Gilroy 2002), and information contained within the *Noise Assessment Study for the Barberi Urban Service Area Amendment.* The noise study is included in Appendix F. One comment regarding noise impacts was received during circulation of the Notice of Preparation and several comments regarding noise impacts were receiving during the public scoping meeting.

Thresholds of Significance

The City of Gilroy CEQA thresholds of significance states that a project may have a significant effect on the environmental if the project would:

- Result in exposure of persons to or generation of noise levels in excess of standards established in the general plan;
- Result in exposure of persons to or generation of excessive ground-borne vibration or ground borne noise levels; or

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

In addition, one of the City of Gilroy thresholds of significance for aesthetic impacts relates to noise issues. A project may have a significant aesthetic effect if the project would:

- Include a wall or fence greater than seven feet in height measured from the finished grade on the higher side of the fence, or as allowed by the Gilroy Zoning Ordinance, Section 34.

Policy and Regulatory Issues

Policy 26.01 Noise and Land Use. Establish a physical development pattern that is compatible with the noise environment of Gilroy, ensuring that residential neighborhoods and park areas are the quietest areas in the community.

Policy 26.02 Maximum Permissible Noise Levels. Ensure that outdoor and indoor noise levels be within the maximum permitted levels (see Figure 8-3). Prohibit further development in areas where noise levels currently exceed these standards, or where such development will cause levels to exceed the permitted maximum.

Table 9, Permissible Maximum Outdoor and Indoor Noise Levels, presents maximum acceptable noise levels for residential and commercial land use categories.

TABLE 9

Permissible Maximum Outdoor and Indoor Noise Levels

Land Use Category	Max. Outdoor L_{DN} (dB)	Max. Indoor L_{DN} (dB)
Residential	60	45
Commercial	65	61

Source: Gilroy General Plan, Figure 8-3 (Notes excluded - see text below)

As explained in the notes to general plan figure 8-3, the outdoor sound levels for residential properties shall be held to 60 dB, under normal conditions, or a maximum of 70 dB if all of the following findings can be made:

- Potential noise levels exceeding the 60 dB standard are generally limited to less than 10 percent of the entire project site;
- Reasonably accepted sound attenuation measures have been incorporated into the project design;
- Potential noise levels are part of the developer's disclosure to future residents;
- Interior noise limits established by the general plan are strictly maintained; and
- Potential noise levels will not jeopardize the health, safety, and general welfare of the public.

Nevertheless, a 60-dB outdoor noise level shall be maintained at active living or recreational areas for all dwellings, rather than all yards surrounding an entire dwelling.

> **Policy 26.04 Acoustical Design.** Consider the acoustical design of projects in the development review process to reduce noise to an acceptable level. Ensure that noise mitigation features are designed and implemented in an aesthetically pleasing and consistent manner.

> **Policy 26.05 Earth Berms.** Require landscaped earth berms as an alternative to soundwalls where feasible to buffer noise along major thoroughfares adjacent to residential areas. Where an earth berm is not feasible, an alternative approach [that may include a masonry wall screened with drought tolerant, low maintenance landscaping] should be explored that is sensitive to the natural and man-made environment.

> **Gilroy Zoning Ordinance Section 34.** Except in the following situations, fences and hedges in residential districts are permitted up to seven feet in height, measured from the finished grade on the higher side of the fence… (g) Where a fence or sound wall is required to meet sound attenuation standards as required by California Administrative Code Title 24 in addition to the standards of this Section, such standards shall supersede the standards of this Section.

Environmental Setting

Existing noise levels at the project site are primarily from traffic on adjacent roads. Principal noise sources identified in the noise study were U.S. Highway 101, Monterey Street, and Luchessa Avenue. Existing noise levels were measured along Monterey Street and Luchessa Avenue. The existing exterior noise exposure at the property boundary (about 85 feet from the centerline of Monterey Street) is estimated to be 70 dB L_{DN} (day-night weighted level). The existing exterior noise exposure at the property

boundary (estimated to be 40 feet from the centerline of Luchessa Avenue) is estimated to be 69 dB L_{DN}.

Project Analysis

Construction Noise Impacts

Construction would result in significantly elevated short-term noise levels. Construction equipment typically generates noise levels in the range of 70 to 90 dB at a distance of 50 feet. Existing residences to the north of Luchessa Avenue could experience construction noise effects. Residences near roads adjacent to the project site could be subjected to excessive noise from trucks hauling materials and equipment to the project site.

Traffic Noise Effects on the Proposed Project

Residences constructed within 470 feet of the centerline of Monterey Street would be exposed to noise in excess of City standards as identified in the general plan noise element. Residences constructed within 235 feet of the centerline of Luchessa Avenue would be exposed to noise in excess of standards as established in the Gilroy Noise Element. Because Luchessa Avenue is an arterial road, houses will not be allowed to front on it. Houses will front on interior streets. Backyards of houses backing onto Luchessa Avenue would exceed City noise standards, and would not likely provide an outdoor space within City noise standards. More than ten percent of the residential areas would experience noise levels in excess of City noise standards. Figure 6, Noise Contours, shows the approximate location of the 60 dB_{DNL} noise contour on the project site under cumulative conditions. Commercial areas within 225 feet of Monterey Street would exceed the standard for commercial uses. Commercial uses within 110 feet of the centerline of Luchessa Avenue would be exposed to noise in excess of City standards.

The exterior noise environment is mitigated through the use of sound barriers, which includes earth berms, fences, walls or any other solid, air-tight material, increased setbacks of noise sensitive spaces, such as rear yards and patios, and control of the noise source, such as reducing vehicle speed or smoothing a rough road.

As development of the site has not yet been planned, precise mitigation measures cannot be determined. However, if residential rear yards back up to Monterey Street, noise control barriers up to 13 ft. high would be necessary to reduce the Monterey Street traffic noise exposures to acceptable levels.

If residential rear yards back up to Luchessa Avenue, noise control barriers up to nine feet high would be necessary to reduce Luchessa Avenue traffic noise exposures to acceptable levels.

Sports Park Noise Effects on the Proposed Project

The ball fields at the Gilroy sports park are expected to generate a noise exposure up to 63 dB L_{DN} at the most affected project site property line. The 60 dB L_{DN} would be 175 feet from the sports park property line. Refer to Figure 6, Noise Contours. Residences constructed within 175 feet of the south property line of the project site would be exposed to noise in excess of standards, as established in the general plan noise element. If multi-family dwellings are located within the 60 dB L_{DN} noise contours, an acoustical analysis will be required per the State Building Code.

Homes along the south property line of the site would be affected by ball field noise at the adjacent Gilroy sports park. Previous studies of the sports park revealed that a six-foot high noise control barrier would be necessary if homes back up to the property line common with the park.

Project and Cumulative Development Impacts to Existing Residential Areas North of Luchessa

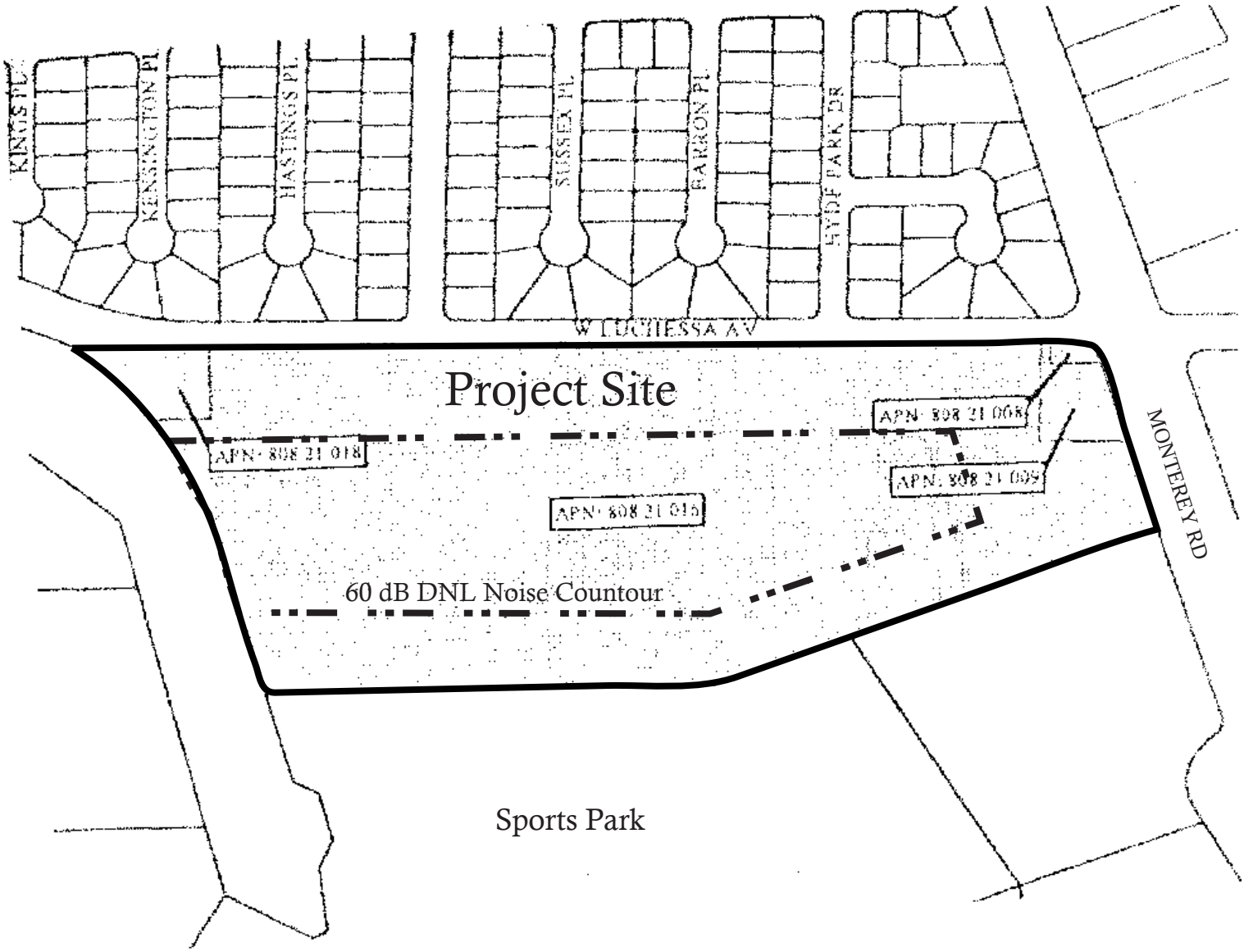
Traffic volumes are the major noise source near the project site. The addition of project traffic to local roadways would result in an increase in traffic noise levels. Along Luchessa Avenue, traffic volumes would increase more than 15 percent due to project-generated traffic. This increase in traffic volumes would result in noise levels increasing more than one decibel due to project-generated traffic. The noise study concludes that the proposed project would be responsible for about half of the future noise increase along Luchesssa Avenue, and cumulative development would be responsible for the other half. Houses at the intersections of Luchessa Avenue with Princevalle, Church, and Hyde Park streets are not protected by sound walls. In addition, the existing sound wall along Luchessa Avenue is not tall enough to fully mitigate traffic noise along Luchessa Avenue.

Interior Noise Levels

Interior noise levels are typically 15 decibels lower than outdoor noise levels due to the attenuating effect of typically building construction. The noise standards reflect this difference and therefore, since noise levels would be excess of standards in outdoor areas, they would also be in excess of standards in indoor areas.

Impacts and Mitigation Measures

Potentially Significant Impact–Short-Term Construction Noise. Short-term noise could occur from construction activities at the project site. The temporary elevation of noise may pose a significant impact to nearby residents. Implementation of the following mitigation measure would reduce this impact to a less than significant level.



0 325 feet

Source:Jeff Pack Associates and EMC Planning Group Inc.

Figure 6

Noise Contour

Barberi Urban Service Area Amendment Subsequent EIR

E M C

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Mitigation Measure

8. Prior to issuance of a grading permit, the following measures shall be incorporated into the project plans to mitigate construction noise, subject to the review and approval of the City of Gilroy Engineering and Building divisions:

    a. Construction shall be limited to weekdays between 7 AM and 7 PM, and Saturdays between 9 AM and 7 PM, with no construction on Sundays or City holidays;

    b. All internal combustion engine-driven equipment shall be equipped with mufflers that are in good condition and appropriate for the equipment; and

    c. Stationary noise-generating equipment shall be located as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction project area.

Significant Impact – Noise Exposure at Proposed Residences in Excess of City Standards. Proposed residences on the project site along Monterey Street and Luchessa Avenue would experience noise levels that exceed the City's standards for residences. This would be a significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

9. Associated with project-level environmental review when residential development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. The study shall include descriptions of the exterior and interior noise exposures under existing and future conditions and the mitigation measures necessary to achieve compliance with the City of Gilroy Noise Element and the State of California Code of Regulations, Title 24 (as applied to multi-family housing).

    If residential lots are proposed within 235 feet south of the Luchessa Avenue centerline (195 feet from the present property line), or within 470 feet of the centerline of Monterey Street, up to a nine-foot tall noise barrier may be required between the lots and Luchessa Avenue or Monterey Street. The barrier shall be consistent with the policies of the general plan, and if feasible, shall be an earth berm.

    Specific mitigation measures identified in the project specific noise assessment shall be incorporated into the project design.

Note: Construction of a noise barrier greater than seven feet in height would be considered a significant visual impact, in accordance with the City of Gilroy

thresholds of significance for aesthetics. See discussion below, Secondary Impacts, for additional information.

Significant Impact – Noise Exposure at Proposed Commercial. Proposed commercial buildings, on the project site along Monterey Street and Luchessa Avenue, would experience exterior noise levels that exceed City's standards. This would be a significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

10. Associated with project-level environmental review when commercial development applications are submitted, a detailed noise assessment study shall be conducted for the proposed development. The study shall include descriptions of the exterior and interior noise exposures under existing and future conditions and the mitigation measures necessary to achieve compliance with the City of Gilroy Noise Element.

    Preliminary evaluation concludes that no commercial building doors or operable windows should be allowed within 110 feet south of the Luchessa Avenue centerline, or within 225 feet west of the of Monterey Street centerline, and no outdoor use should be allowed in these areas.

    Specific mitigation measures identified in the project specific noise assessment shall be incorporated into the project design.

Significant Impact—Noise Impact on Existing Residences North of Luchessa Avenue. Traffic generated by the proposed project would increase ambient noise levels along Luchessa Avenue by one to two decibels. Under cumulative, long-term conditions, the increase would be a total of two to three decibels. Approximately one-half of the impact would be from development of the project site and approximately one-half of the impact would be from cumulative development within the city. The increase in noise would be considered significant with or without development of the project site, based upon cumulative development within the city. Therefore, from both a project level and cumulative development level, the noise impacts on the adjacent residences would be considered a significant adverse environmental impact. Implementation of the following mitigation measure is required.

Mitigation Measure

11. The developer shall review the existing barrier along Luchessa Avenue to determine if a three-foot high extension could be added. If this is not effective and/or feasible, a new, nine-foot high barrier shall be constructed in its place. The extension or new barrier shall be constructed prior to issuance of a grading permit for the project site, or when the City determines that noise exposure at this location exceeds city standards. The developer shall be responsible for the cost to study and construct the replacement wall or extension.

The entire wall shall be textured and colored, and screened to the extent feasible with drought tolerant, low maintenance landscaping. Any new wall shall be constructed within existing non-access strips on private property, if existing, otherwise immediately adjacent to the property boundary on the public right-of-way.

Note: Construction of a noise barrier greater than seven feet in height would be considered a significant visual impact, in accordance with the City of Gilroy thresholds of significance for aesthetics. See discussion below, Secondary Impacts, for additional information.

Significant Impact – Sports Park-generated Noise. Sports park noise at the southern boundary of the project site would exceed City standards for residential uses. The Gilroy USA Amendment 98-03 Subsequent EIR studied the effects of Sports Park noise on the project site, and concluded that the effect was significant and unavoidable, due to the presence of a flood flowage easement covering about one acre in the south-central portion of the project site. Placement of the necessary sound barrier within this area would potentially disrupt flood flows, and was therefore, not feasible to implement. However, the placement of such a sound barrier may be either a) possible, if it avoids the flood flowage area, or b) unnecessary, if houses at that point are adequately set back from the sports fields. Implementation of the following mitigation measure would reduce noise impacts from sports park activity to a less than significant level.

12. Prior to issuance of building permits for residences with yards within 175 feet of the sports park, the applicant shall demonstrate that noise levels at residential yards are in compliance with the standards of Gilroy General Plan Policy 26.02. This may be accomplished by the construction of a six-foot sound barrier, however, such barrier shall not impinge on the SCVWD flood flowage easement recorded on the project site. A noise study shall be prepared, based on final improvement plans, to demonstrate that the residences are adequately protected from noise impacts.

Potentially Significant Impact – Residential Interior Noise Levels. Traffic noise would result in interior noise levels in existing and proposed residences in excess of City standards. Implementation of the following mitigation measure would reduce this impact to a less than significant level:

Mitigation Measure

13. Subject to the review and approval of the City of Gilroy Building Division, the applicant for any residential development on the project site shall conduct an acoustical study and establish engineering requirements to be included in construction plans to maintain interior noise levels at no greater than 45 dB_{DNL}. Approaches to noise reductions could include use of triple pane windows, ventilation systems with non-operable windows, or noise attenuating wall construction.

Less than Significant Impact –Commercial Interior Noise Levels. Although traffic noise would result in exterior commercial noise levels in excess of City standards the noise attenuation resulting from typical building construction would reduce interior levels below the 61 dB_{DNL} City standard.

Secondary Impacts

Significant and Unavoidable Visual Impact. Construction of a noise barrier greater than seven feet in height would be considered a significant visual impact, in accordance with the City of Gilroy thresholds of significance for aesthetics. Because a nine-foot high wall is necessary to adequately mitigate the noise impact to the residents on the north side of Luchessa Avenue, and may be required to mitigated future development on the project site, the secondary aesthetic impact is considered unavoidable. The City Council would be required to adopt a statement of overriding considerations, concluding that the benefits of the proposed project out weight the significant adverse visual impacts.

2.5 Public Services

Thresholds of Significance

The City of Gilroy CEQA thresholds of significance states that a project may have a significant effect on the environmental if the project would result in substantial adverse physical impacts associated with the provision of or 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 following public services:

- Fire protection;
- Police protection;
- Schools;
- Parks; and/or
- Other public facilities.

Policy and Regulatory Issues

> **Policy 16.01 Park Land Standard.** Maintain the City's established standard of 5 acres of developed park land per thousand population.

Policy 17.02 New Residential Development. Control the timing and location of new residential development in a way that allows the Gilroy Unified School District to plan and finance facilities in an orderly fashion.

Policy 17.04 Land Dedication or Fees. Require developers of new residential subdivisions to dedicate land and/or pay fees to offset the costs of providing new elementary and secondary schools resulting from their developments.

Policy 18.01 Standards of Service. Continue to provide and maintain police and fire services that are adequate in manpower, equipment, and resources to respond to localized emergencies and calls for service within the City. The departments' current level of service should be maintained or improved as the City continues to grow, with average emergency response times for police services of approximately 4.5 minutes and average emergency response time for fire services of less than five minutes.

Environmental Setting - Fire Services

The project site is located in unincorporated Santa Clara County. Fire protection and emergency response services are currently provided by the South Santa Clara County Fire Department (SSCCFD). SSCCFD stations are located at U.S. Highway 101 and Masten Road and at State Route 152 and Burchell Road. The City of Gilroy has an automatic aid agreement with SSCCFD. Under this agreement, the first fire engine company that is able to respond does so automatically, and each agency is reimbursed for services provided within another jurisdiction. The City of Gilroy Fire Department is located at the Chestnut Street station 1.5 miles from the project site, and typically, would be the first fire company to respond to the project site. Additional fire assets will be available at the Santa Teresa Fire Station located 1.2 miles from the project site. However, per the *Updated Gilroy Fire Service Master Plan* this fire station is not expected to be built after 2010 wouldn't even start construction until at least 51 percent of the Glen Loma project is completed.

Project Analysis - Fire Services

With annexation of the project site, the City of Gilroy would assume responsibility for the provision of fire protective services. The proposed project would enlarge the geographic range of coverage for the fire department but would not require the addition or enlargement of facilities or the addition of equipment of personnel. The expanded coverage area is adjacent to the existing service areas and could be reached from the fire station within the five-minute response time (Jackie Bretschneider, personal communication, May 17, 2005). The proposed project would contribute to cumulative citywide impacts on fire services. However, the City requires the payment of public

service impact fees as a standard condition of approval, and payment of this fee would fund the necessary expansion of facilities. Increased property tax revenues from the proposed project would help to fund increased fire department operational costs.

Environmental Setting - Police Services

The project is located in unincorporated Santa Clara County. Police protective services at the project site are currently provided by the Santa Clara County Sheriff's Department.

Project Analysis - Police Services

With the annexation of the project site, the City of Gilroy would assume responsibility for the provisions of police services. The annexation would enlarge the geographic range of coverage for the police department but would not require the addition or enlargement of facilities. The expanded coverage area is adjacent to existing service areas and police would be able to respond within an acceptable period. The City of Gilroy Police Department is staffed on a per capita basis with a preferred ratio of 1.5 sworn officers per 1,000 populations. While no specific development plans have been submitted to the City of Gilroy, the applicant has proposed developing 220 single-family residential units, 30 apartments or condominiums, and 18,000 square feet of commercial uses near Monterey Street. Based on these preliminary plans, the proposed project would add 835 residents, and therefore, the required increase in personnel would be the equivalent of 1.25 officers. Existing police facilities would accommodate the required increase in personnel. The proposed project would contribute to cumulative citywide impacts on police services. However, the City requires the payment of public service impact fees as a standard condition of approval, and payment of this fee would fund the necessary expansion of facilities. Increased property tax revenues from the proposed project would help to fund increased police department operational costs.

Environmental Setting - Schools

The project site is within the boundaries of the Gilroy Unified School District (GUSD). The GUSD has a current total enrollment of approximately 9,847. The enrollment capacity is 10,273 (5,190 for elementary schools, 2,322 for middle schools and 2,761 for secondary schools) (consultant conversation with Charlie Van Meter, Gilroy Unified School District). The GUSD operates fifteen elementary, middle, secondary and continuation schools. The nearest elementary school to the project site is Glen View located on West Eighth Street near Princevalle Street approximately four tenths of a mile from the project site. Brownell and South Valley Junior High Schools are both located near Sixth Street approximately three quarters of a mile from the project site. Ascencion Solorsano Middle School, located on Grenache Way off of Club Drive, is approximately three miles west of the project site. Gilroy High School is located at the intersection of Princevalle Street and Tenth Street, approximately four-tenths of a mile from the project site. A new elementary school west of Greenfield Avenue, approximately one-half mile west of the project site has been approved for construction

on the Glen Loma Ranch. A second comprehensive high school is being planned west of Santa Teresa Boulevard in northern Gilroy.

Project Analysis - Schools

The residential portion of future development at the project site would result in an increase in school-aged children. Table 10, Student Generation, presents the expected number of students to be generated by the residential portion of development of the project site.

TABLE 10

Student Generation

Grade Level	Student Generation Rate	Number of Students
Elementary (K—5)	.16	40
Middle (6—8)	.07	17.5
High (9—12)	.07	17.5
Totals	.30	75

Source: Gilroy Unified School District

Development of the project site would result in an increase in approximately 75 students in elementary, middle, and high school. Senate Bill 50, adopted by the state legislature in 1998 established limitations in the Government Code on mitigation measures that may be imposed by a city, county, school district, or other local agencies in approving a development that may affect schools. Government Code 65996(b) prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approval of any legislative or judicial act involving the planning, use or development of real property. The State establishes the fees that may be assessed. The proposed project would pay the mandated fees established by the State, and the payment of these fees is considered to adequately mitigate school impacts. The City's Residential Development Ordinance controls the rate of population growth, and increases the predictability of the City's future population.

Environmental Setting - Parks

The project site is adjacent to the Gilroy Sports Park site, which will be developed into a major regional park, including sports facilities, picnic areas, and other park facilities. The Uvas Creek bicycle and pedestrian trail ends near the project site, to the north of Luchessa Avenue and will be extended south as part of the Sports Park project. The City of Gilroy assesses park impact fees to fund parkland acquisition and development and meet the parks demands for residents of new development.

Project Analysis - Parks

The proposed project would generate approximately 835 residents. The general plan establishes a ratio of five acres of parkland for each one-thousand residents. The project proponent would be required to pay the City's park impact fees. Payment of impact fees would be required prior to issuance of building permits, and would reduce the impact to a less than significant level.

Impacts and Mitigation Measures

Less Than Significant Impact - Fire Services. The proposed project would incrementally increase the need for additional fire protection services and facilities, but would not decrease the level of services provided to any part of the community. The project site could be served by the City of Gilroy Fire Department within established response times without the need for additional facilities. Standard public safety impact fees would cover incremental increases in demand on fire services. The proposed project would have no physical impact to the environment associated with the provision of fire protective services.

Less than Significant Impact - Police Services. The proposed project would incrementally increase the need for additional facilities for the provision of police services, but would not significantly decrease the level of services provided to any part of the community. The project site could be served by the City of Gilroy Police Department within established response times without the need for additional facilities. The equivalent of 1.25 new officers would be required for the department to maintain established per capita staffing ratios. Standard public safety impact fees would cover incremental increases in demand on police services. The proposed project would have no physical impact to the environment associated with the provisions of police protective services.

Less Than Significant Impact – Additional Student Enrollment. The proposed project would add approximately 75 students to the GUSD. The students would be absorbed within existing school facilities. The incremental effects of additional students on GUSD schools would be reduced to a less than significant impact through standard school impacts fees established in Government Code 65995.

2.6 Transportation/Traffic

Fehr & Peers and Associates prepared the *Barberi Urban Service Area Amendment Traffic Impact Analysis* to assess the proposed projects effects on transportation and traffic. The text, tables, and figures of the traffic report are included as Appendix G. The complete traffic report, including all levels of service calculations, is available for review at the Gilroy Planning Division.

Thresholds of Significance

The City of Gilroy CEQA thresholds of significance states that a project may have a significant effect on the environmental if the project would:

- For signalized intersection:
  - ◊ Cause a signalized intersection Level of Service to fall from A, B, or C, to D, E, or F, except in commercial and industrial areas (as specified on the Standard Levels of Service Map, page 6-11 of the general plan) where the LOS falls from A, B, C, or D, to E or F.

    For signalized intersections already operating at unacceptable LOS D, a significant impact would occur if a project increases average delay more than 2.0 seconds.

    For signalized intersections already operating at unacceptable LOS E or F, a significant impact would occur if a project increases average delay by 1.0 second. A one second increase in delay is well within variations in delay experienced from day to day. This increase would be indiscernible by the motoring public.

    Staff will have the flexibility to determine significance when the forecasted average vehicular delay is within two seconds of the acceptable level of service standard. Determinations would be based upon size of the project, the specific intersection/road segment affected, and any extenuating circumstances.
- For Unsignalized Intersections
  - ◊ Same as signalized intersections. In addition, the threshold for a significant impact at an unsignalized intersection would occur if the side street level of service is E or worse and the peak hour signal warrant established in the most recent version of the Caltrans Traffic Manual is met.
- Exceed, either individually or cumulatively, a level of service standard established by the Santa Clara Valley Transportation Authority for designated roads or highways;
- Substantially increase hazards due to a design feature or incompatible `uses;
- Result in inadequate emergency access;
- Result in inadequate parking capacity; or
- Conflict with any City of Gilroy General Plan Transportation and Circulation Element policies.

The following discussion and any identified impacts are based on these thresholds. If an anticipated impact exceeds a threshold, feasible mitigation measures are presented to lessen that impact.

Policy and Regulatory Issues

> **Policy 12.08 Level of Service.** Maintain traffic conditions at LOS C or better at Gilroy intersections and roadways, allowing some commercial and industrial areas as specified on the Level of Service D Areas Map on page 6-11 of the Gilroy General Plan to operate at LOS D or better. Exceptions to this standard will be allowed only where the City Council determines that the improvements needed to maintain the City's standard level of service at specific locations are infeasible.

Most of the LOS D areas designated by the general plan are to the east of U.S. Highway 101, however, two intersections near the project site are included within the LOS D area. The intersections of Monterey Street/Luchessa Avenue, and Monterey Street/Tenth Street have an LOS standard of LOS D.

> **Policy 12.11 On-site Parking.** Ensure adequate on-site parking in new development to meet the needs of residents, employees, and patrons, in keeping with the requirements of the City's Zoning Ordinance…

> **Policy 12.12 Shared Parking.** Encourage shared parking facilities where uses on the same or adjoining sites have parking requirements at different times of the day or week.

> **Policy 13.01 Transit and Development.** Plan new residential and commercial development to fully accommodate, enhance, and facilitate public transit, including pedestrian and bicycle access to transit.

> **Policy 14.01 Non-Auto Modes of Travel.** Emphasize on-auto travel modes of transportation as a key strategy for achieving air quality goals. For example, encourage bicycle riding to school from an early age by providing safer bikeways between residential areas and schools and encourage the schools to provide secured bike racks and/or lockers.

> **Policy 14.02 Land Use Planning to Promote Walking and Biking.** Promote compact, mixed use development patterns that encourage pedestrian and bicycle travel and transit use… Providing neighborhood commercial and park uses within residential developments can reduce

> short auto trips by making pedestrian and bicycle trips feasible. Support implementation of the Neighborhood Districts… for their potential air quality benefits, as well as other community benefits.

Environmental Setting

Regional access to the project site is provided by U.S. Highway 101 and State Route 152, while local access is provided by Monterey Street, Farman Frontage Road, Luchessa Avenue, Thomas Road, Princevalle Street, and Church Street.

Studied Intersections and Roadways

The following intersections and freeway segments were analyzed for the weekday AM, weekday PM, and weekend peak hour traffic conditions:

Intersections

- Luchessa Avenue and Thomas Road;
- Luchessa Avenue and Princevalle Street;
- Monterey Street and Luchessa Avenue; and
- Monterey Street and Tenth Street.

Freeway Segments

- U.S. Highway 101/Monterey Street to Bloomfield Avenue;
- U.S. Highway 101/Tenth Street to Monterey Street; and
- U.S. Highway 101/Leavesley Road to Monterey Street.

Existing Road Network

U.S. Highway 101 provides access to the project site via an interchange at Monterey Street and State Route 152 (Tenth Street). North of its interchange with Monterey Street, U.S. Highway101 is a six-lane freeway. South of Monterey Street, U.S. Highway 101 becomes a four-lane conventional highway. U.S. Highway 101 extends northward through San Jose and San Francisco and southward through the California Central Coast.

State Route 152 (Pacheco Pass Highway) connects U.S. Highway 101 to Interstate 5 and Highway 99 in the Central Valley. Within the study area, (between U.S. Highway 101 and Monterey Street), State Route 152 is two to four lanes wide. State Route 152 is designated concurrently with a portion of U.S. Highway 101, and also follows Leavesley Road, Monterey Street, and First Street through Gilroy.

Monterey Street is, a two- to four-lane arterial through the City of Gilroy. Through downtown Gilroy (between Third and Seventh Streets), Monterey Street includes two travel lanes in each direction. North of the city limits, Monterey Street becomes Monterey Road, a rural highway with four travel lanes and a center turn lane. Monterey Road continues northward into San Jose. South of its interchange with U.S. Highway101, Monterey Street becomes Bolsa Road. Adjacent to the project site, Monterey Street includes four travel lanes and the posted speed limit is 50 miles per hour (mph).

Farman Frontage Road (formerly Monterey Frontage Road) is a two-lane road that extends southward from Monterey Street, north of the Monterey Street/U.S. Highway 101 interchange, ending in a cul-de-sac south of the project site. Farman Frontage Road is located along the west side of U.S. Highway 101.

Luchessa Avenue is a two-to-four lane roadway that extends eastward from Greenfield Drive and terminates east of U.S. Highway 101, east of its intersection with Rossi Lane. The segment of Luchessa Avenue between Thomas Road and Monterey Street was recently renamed from Thomas Road to Luchessa Avenue. Near the project site, Luchessa Avenue is two lanes wide, and the speed limit is 40 mph.

Thomas Road is a two-lane roadway that extends northward from Santa Teresa Boulevard to its all-way stop controlled intersection with Luchessa Avenue. The speed limit is 40 mph on Thomas Road.

Princevalle Street is a two-lane residential collector street in the vicinity of the project site. Princevalle Street extends northward from Luchessa Avenue to First Street. This street has a posted speed limit of 30 mph.

Church Street is a two-lane street in the vicinity of the project site. Church Street extends northward from Luchessa Avenue through Gilroy to north of Farrell Avenue. Church Street between Luchessa Avenue and Farrell Avenue is designated an arterial and has a posted speed limit of 35 mph.

Alternate Transportation

Transit Service. Bus service in Santa Clara County is operated by the Santa Clara Valley Transportation Authority (VTA). Currently, there are two bus routes operating within one-half mile of the project site: Route 68 and Route 17.

Route 68 operates along Princevalle Street, north of Luchessa Avenue and along Luchessa Avenue and Thomas Road, west of Princevalle Street. Route 68 provides service between San Jose Diridon CalTrain Station and Gavilan College in Gilroy. Hours of operation are 4:15 am to 1:15 am on weekdays and 5:45 am to 1:15 am on weekends. Route 68 operates on a 15-minute headway during the commute hours and a 30 to 60-minute headway during other hours.

Route 17 operates along Monterey Street, north of Tenth Street and continues along Tenth Street, on State Route 152 eastward. Route 17 provides local service between St. Louise Regional Hospital and the Gilroy CalTrain Station. Hours of operation are 7:15 am to 7:15 pm on weekdays and 9:00 am to 6:45 pm on weekends. Route 17 operates on a 45-minute headway during weekdays and a 60-minute headway during weekends.

CalTrain provides frequent train service between San Jose and San Francisco seven days a week. On weekdays, CalTrain provides northbound service from Gilroy during the morning commute period and southbound service to Gilroy during the evening commute period. The Gilroy station, near the intersection of Seventh and Monterey streets, is about one mile north of the project site.

Pedestrian and Bicycle Facilities. Pedestrian facilities comprise sidewalks, crosswalks, and pedestrian signals. Near the project site, few pedestrian facilities are provided. A sidewalk is located along the north side of Luchessa Avenue between Monterey Street and Princevalle Street. Sidewalks are discontinuous along Monterey Street near the project site.

Bicycle facilities comprise bike paths, bike lanes, and bike routes. Bike paths are paved trails that are separated from the roadways. Bike lanes are lanes on roadways that are designated for use by bicycles by striping, pavement, legends, and signs. Bike routes are roadways that are designated for bicycle use with signs. A bike path is located along the eastern side of Uvas Creek between Luchessa Avenue and Westwood Avenue, northwest of the project site. Bike lanes are marked on Princevalle Street, between Luchessa Avenue and Sixth Street, and on Thomas Road between Luchessa Avenue and Babbs Creek Drive.

Existing Traffic Conditions

Operations of the key intersections were evaluated with the existing volumes and existing lane configurations. Under existing conditions, the Princevalle Street/Luchessa Avenue study intersection is controlled with a stop sign on the minor street approach. The Thomas Road/Luchessa Avenue intersection is controlled with stop signs on all approaches, while the intersections of Monterey Street/Luchessa Avenue and Monterey Street/Tenth Street are signalized. Table 11, Existing Levels of Service, presents the existing levels of service for the study intersections.

Background Traffic Conditions

Background Conditions are defined as the traffic conditions prior to completion of the proposed development. Traffic volumes for Background Conditions comprise existing volumes from counts plus traffic generated by approved, yet not constructed, developments in the area. The results of the level of service analysis for Background Conditions are presented in Table 12, Background Intersection Levels of Service, and form the baseline for determining project impacts. All intersections are projected to operate at acceptable conditions under background conditions.

TABLE 11

Existing Intersection Levels of Service

Intersection	Peak Hour	LOS
Luchessa Avenue/Thomas Road	AM	B
	PM	A
Luchessa Avenue/Princevalle Street	AM	C
	PM	B
Luchessa Avenue/Monterey Street	AM	C
	PM	C-
Monterey Street/Tenth Street	AM	B
	PM	C+

Source: Fehr & Peers

TABLE 12

Background Intersection Levels of Service

Intersection	Peak Hour	LOS
Luchessa Avenue/Thomas Road	AM	B
	PM	B
Luchessa Avenue/Princevalle Street	AM	C
	PM	C
Luchessa Avenue/Monterey Street	AM	C
	PM	D+
Monterey Street/Tenth Street	AM	B-
	PM	C

Source: Fehr & Peers

Project Analysis

Site Access

Access to the proposed project would be provided by a commercial driveway(s) and new streets intersecting Luchessa Avenue. Although no site plan has be been developed, the logical location for the residential accesses would be at Church Street and at Hyde Park Drive. Commercial driveway(s) would likely be from Monterey Street, due to the better customer exposure and access preferred for commercial properties.

Trip Generation

The amount of traffic generated by the proposed project was estimated by applying appropriate trip generation rates from the Institute of Transportation Engineers' (ITE) *Trip Generation* (7th Edition) to each type of proposed land use. Trip generation rates for "820 - Shopping Center" (123.78 trips per 1,000 square feet), "210 - Single-Family Detached" (9.8 trips per house), and "220 - Apartment" (11.0 trips per unit) were used to estimate the number of proposed project trips.

A reduction of 25 percent was applied to the commercial trips to account for pass-by trips during the peak hours. Pass-by trips are trips to the project site made by vehicles already traveling by the project site on the adjacent street (i.e., these vehicles make an interim stop between their primary origin and destination). Pass-by trips are included in the analysis of traffic that enters and exits the project site, but are not considered new trips added to the street system by the proposed project. The proposed project would generate 4,707 daily trips, including 223 AM peak-hour trips (72 inbound/151 outbound), and 403 PM peak-hour factor trips (230 inbound/173 outbound). Single-family residences would generate about 2,148 trips (46 percent), the high-density residential would generate about 331 trips (7 percent), and the commercial would generate about 2,228 trips (47 percent).

Trip Distribution and Assignment

The trip distribution pattern was developed based on existing travel patterns in the vicinity of the site and the relative locations of complementary land uses in the area. Separate trip distribution patterns were developed for each project component. Table 13, Trip Distribution Pattern, presents the major directions of approach and departure.

The peak-hour trips generated by the proposed project were assigned to the roadway system based on the distribution pattern described above.

Project Intersection Levels of Service

Project trips were added to background traffic volumes to estimate volumes under Project Conditions. The results of the LOS analysis for Project Conditions are summarized in Table 14, Project Intersections Level of Service. All intersections would operate at acceptable levels of service during both peak hours.

The intersections of Luchessa Avenue/Monterey Street and Monterey Street/Tenth Street are projected to operate at LOS D or better during both peak hours under Project Conditions. These intersections are within the LOS D area, therefore, the project conditions traffic operations would be acceptable at these intersections.

TABLE 13

Trip Distribution Pattern

Road Segment	Residential Trip Distribution	Commercial Trip Distribution
Luchessa Avenue (west)	0%	5%
Luchessa Avenue/Thomas Road	5%	5%
Luchessa Avenue (east)	2%	0%
Santa Teresa Boulevard/Thomas Road	9%	25%
Monterey Street (south)	12%	15%
Tenth Street/Princevalle Street	3%	5%
Tenth Street/Church Street	4%	8%
Tenth Street/Monterey Street	15%	17%
Tenth Street/U.S. Highway 101	50%	20%

Source: Fehr & Peers

TABLE 14

Project Intersection Levels of Service

Intersection	Peak Hour	LOS
Luchessa Avenue/Thomas Road	AM PM	C B
Luchessa Avenue/Princevalle Street	AM PM	C C
Luchessa Avenue/Monterey Street	AM PM	C D
Monterey Street/Tenth Street	AM PM	C+ C-

Source: Fehr & Peers

The overall operations of the Monterey Street/Tenth Street intersection are acceptable under Project Conditions. However, the traffic consultant observed that the permitted phasing for the eastbound and westbound left-turn movements causes excessive delays for left-turning vehicles. Vehicles making these movements were occasionally prevented from making this movement in one signal cycle length due to the heavy opposing through movements. In several cases during the hour observed, only one vehicle was able to turn during each cycle. This creates a situation where drivers become frustrated and attempt to cross the oncoming traffic without adequate gaps in oncoming traffic. The project is projected to add volume to the westbound left-turn movement during both peak hours, which would exasperate the condition.

State Highway Traffic

According to CMP 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 U. S. Highway 101 were reviewed during the AM and PM peak hours to determine if a significant amount of project traffic would be added to these freeway segments. Capacities of 2,300 and 1,800 vehicles per hour per lane (vphpl) were used for the mixed flow and high-occupancy vehicle (HOV) lanes, respectively. All segments would operate at an acceptable level of service during both peak hours. The proposed project would not have a significant impact on any of the segments of U. S. Highway 101.

Site Access

Single-family residential access from Luchessa Avenue is assumed to be from intersections with Princevalle Street and Church or Hyde Park streets. These connections would function acceptably and meet City improvement standards. The traffic report identifies potential conflicts between the commercial driveway(s) and movement of high traffic volumes along Monterey Street. Left turns into or out of the commercial site would definitely conflict with movements on Monterey Street, so driveways would need to be limited to right turns in and out. The traffic report recommends further study of site access at the time specific design approvals are sought. Similar access issues may arise regarding high-density housing development if proposed to front on Monterey Street.

Alternative Transportation

One objective of the Neighborhood District land use designation is to minimize auto trips. The proposed project would be close enough to two transit lines to provide conveniently located service. The mixture of uses and proximity to other uses could serve to meet the Neighborhood District objective of placing services convenient to potential users, such as stores near residences. However, because there is currently no request for site plan or subdivision approval, no information is available to determine if the proposed project would facilitate bicycle and pedestrian trips between the adjacent uses.

Impacts and Mitigation Measures

Potentially Significant Impact - Left turn Delays at Monterey Street/Tenth Street Intersection. This intersection would operate at an acceptable level of service during project conditions. However, the permitted phasing for the eastbound and westbound left-turn movements causes excessive delays for left-turning vehicles. The proposed project would add volume to the westbound left-turn movement during both peak hours, which could exacerbate this condition and result in a potentially significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level:

Mitigation Measure

14. The developer of the first project on the project site shall install a full eight-phase signal operation at the Monterey Street/Tenth Street intersection to provide protected left turns on the eastbound and westbound approaches and increase the capacity of the left-turn movement. The signal shall be installed prior to issuance of the first residential or commercial occupancy permit, subject to review and approval by the City Engineering Division.

Potentially Significant Impact - Commercial Site Access. Access to the commercial site from Monterey Street could result in conflicts with other movements along Monterey Street. This is a potentially significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measure

15. Prior to Architectural and Site Review Approval for the commercial area or high-density residential uses along Monterey Street, or other residential development if an access street is proposed to connect to Monterey Street, a traffic study and engineering design shall be performed to evaluate traffic flow and turning movements along Monterey Street and Luchessa Avenue, and determine suitability of driveway locations on Monterey Street and Luchessa Avenue. If necessary, full access may be provided by an internal street. Driveways along Monterey Street shall be limited to right turns in and out.

Potentially Significant Impact - Pedestrian and Bicycle Circulation. Continuous sidewalks are not provided on the south side of Luchessa Avenue, restricting pedestrian access in and around the project site, and resulting in a potentially dangerous pedestrian environment. The *City of Gilroy Traffic Circulation Master Plan* identifies bicycle lanes on Luchessa Avenue and Monterey Street adjacent to the project site. One objective of the Neighborhood District land use designation is to minimize auto trips. The mixture of uses and proximity to other uses could serve to meet that objective, but that cannot be assured unless appropriate connections for bicycles and pedestrians are provided. This is a potentially significant impact. Implementation of the following mitigation measures would reduce this impact to a less than significant level:

Mitigation Measures

16. The developer shall construct frontage improvements along Luchessa Avenue and Monterey Street concurrent with adjacent development on the project site. The pedestrian improvements shall be completed prior to the issuance of occupancy permits for the adjacent uses. The frontage improvements shall include construction of a half-street section including the eastbound lanes of Luchessa Avenue, the southbound lanes of Monterey Street, and adjacent sidewalks, curbs, gutters, and landscaping, and the re-striping of the pedestrian crosswalks serving the southwest corner of the Monterey Street and Luchessa Avenue intersection.

17. Site plans and tentative maps shall include the following bicycle and pedestrian connections:

    a. a connection to the Uvas Creek trail;

    b. a connection near the center of the project site to the Sports Park; and

    c. a connection between the commercial and residential areas (this connection would be satisfied if an internal street with sidewalk were provided).

Less than Significant Impact—Transit Facilities. The proposed project is not expected to generate a substantial amount of transit ridership (approximately four percent according to census data). When applied to the projected trip generation estimates the proposed project would generate nine AM and 16 PM peak-hour transit trips. Therefore, the proposed project would not cause a significant impact to the transit facilities. It is however, recommended that the first developer at the project site coordinate with the City of Gilroy and Valley Transportation Authority to determine the need for, and possible location of, a bus stop in the vicinity of the Luchessa Avenue/Monterey Street intersection to serve the proposed project.

2.7 Utilities and Service Systems

Thresholds of Significance

The City of Gilroy CEQA thresholds of significance states that a project may have a significant effect on the environmental if the project would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

- 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;

- 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;

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;

- 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

- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid-waste disposal needs.

Policy and Regulatory Issues

Policy 19.03 Sewer, Treatment, Disposal Capacities. Provide and maintain adequate sewers, wastewater treatment and treated water disposal capacities to meet the needs of future growth (residential, industrial and other).

Policy 19.04 Timing and Location of Development. Manage the time and location of new development according to the ability of the sewer system and treatment plant to accommodate the effluent generated by the proposed development. Ensure that adequate sewer and treatment capacity is funded and in place prior to occupation of new buildings.

Policy 19.10 Provision of Utilities. Work with public, quasi-public and private utility providers to ensure adequate levels of service to City residents.

Environmental Setting - Wastewater Treatment

According to the general plan, the sewage treatment plant capacity is 7.5 million gallons per day (mgd) and will ultimately be expanded to 15 mgd. The sewage treatment plant has adequate capacity to serve planned development. The City prepared the *City of Gilroy Sewer Master Plan* was prepared in May of 2004, based on the land use designations of the general plan. The *City of Gilroy Sewer Master Plan* projected sewer demands based on typical generation rates for various uses.

Project Analysis - Wastewater Treatment

Based on demand factors in the *City of Gilroy Sewer Master Plan,* the proposed project would generate approximately .042 mgd of wastewater. Refer to Table 15, Project Wastewater Generation.

TABLE 15

Wastewater Generation

Land Use	Acres	Demand Factor	Project Demand
Commercial	1.5 acres	300 gallons per day	450 gallons per day
High Density Residential	1.5 acres	2,750 gallons per day	4,125 gallons per day
Residential	24.7 acres	1,500 gallons per day	37,080 gallons per day
Total			**41,655 gallons per day**

Note: 41,655 gallons per day /1,000,000 =.042 mgd.

Source: Gilroy Sewer Master Plan, EMC Planning Group Inc.,

The proposed project is consistent with the general plan, and therefore, consistent with the assumptions used in preparing the *City of Gilroy Sewer Master Plan.* Therefore, the sewer demand that would be generated by the proposed project would be within the range planned for the City's sewer facilities. Residential development within the City is regulated by the City's Residential Development Ordinance, so that the City can plan for and construct utility infrastructure in a timely manner. The proposed project would not have a significant adverse effect on the City's wastewater treatment capacity, nor require new infrastructure not already anticipated.

Environmental Setting - Water Supply

The City prepared the *City of Gilroy Water System Master Plan* and *City of Gilroy Urban Water Management Plan* in 2004 to guide development of the City's water supply system. The City of Gilroy relies on groundwater, pumped from wells throughout the City, for its water supply. The existing agricultural uses draw irrigation water from on-site wells.

Project Analysis - Water Supply

Based on demand factors in the City of Gilroy Water System Master Plan, the proposed project would use .059 mgd of water. Refer to Table 16, Proposed Project Water Demand.

TABLE 16

Proposed Project Water Demand

Land Use	Acres	Demand Factor	Project Demand
Commercial	1.5 acres	800 gallons per day	1,200 gallons per day
High Density Residential	1.5 acres	4,000 gallons per day	6,000 gallons per day
Residential	24.7 acres	2,100 acres per day	51,870 gallons per day
Total			59,070 gallons per day

59,070 gallons per day / 1,000,000 = 0.059 mgd.

Source: Gilroy Sewer Master Plan, EMC Planning Group Inc.,

The City of Gilroy has an adequate supply of potable water available to meet the City's projected demands, including the demands of the proposed project. The project site is located within the area studied by the *City of Gilroy Water System Master Plan* and *City of Gilroy Urban Water Management Plan,* which are consistent with the general plan. The proposed project land uses are consistent with the general plan, and therefore, consistent with the assumptions used in preparing the water supply reports. Residential development within the City is regulated by the City's Residential Development

Ordinance, so that the City can plan for and construct utility infrastructure in a timely manner. The proposed project would not have a significant adverse effect on the City's water supply infrastructure, nor require new infrastructure not already anticipated.

Environmental Setting - Landfill Capacity

Solid waste from the City of Gilroy is collected and disposed of by South Valley Disposal and Recycling (SFDR). The waste has historically been sent to the Pacheco Pass Landfill, which was at 80 percent capacity in 2001. Much of the City's solid waste is now sent to two landfills in Monterey County, neither of which is at capacity (Freddy Lewis, telephone conversation with consultant, January 6, 2005). The City of Gilroy has a contract with the SVDR to serve the city until 2013.

Project Analysis - Landfill Capacity

The proposed project is within the City's general plan area and has been considered in the long-term waste management planning. In addition, the recycling opportunities available throughout the City of Gilroy would also be available to the proposed project. Therefore, the proposed project is expected to have a less than significant impact on solid waste services and facilities.

Impacts and Mitigation Measures

Less Than Significant Impact – Wastewater Treatment. The City of Gilroy has adequate wastewater treatment capacity to serve the proposed project. The proposed project would not require offsite expansion of City infrastructure. The proposed project would pay a development impact fee to offset the incremental increases in demand associated with the proposed project.

Less Than Significant Impact – Water Supply. The City of Gilroy has adequate water supplies and delivery infrastructure to serve the proposed project. The proposed project would not require offsite expansion of City infrastructure. The proposed project would pay a development impact fee to offset the incremental increases in demand associated with the proposed project.

Less Than Significant Impact – Landfill Capacity. The City of Gilroy contracts solid waste disposal services. The landfills utilized for the City's solid waste have adequate capacity to serve the proposed project. The proposed project would not require offsite expansion of landfills.

2.8 Issues Adequately Addressed in the Initial Study or Prior CEQA Documents

For the issues of aesthetics, cultural resources, geology and soils, hydrology and water quality, and hazards, the *Barberi Urban Service Area Amendment Initial Study* determined that no further study was required. These issue areas were determined to have:

- a less than a significant impact; or
- an impact for which standard measures would adequately mitigate effects; or
- an impact for which adequate mitigation was already presented in the Amendment SEIR.

The *Barberi Urban Service Area Amendment Initial Study* is incorporated within this SEIR in Appendix A. Applicable mitigation measures from earlier analyses are presented in this section.

Aesthetics

The project site is in an area that is transitioning from rural to urban because of the sports park and other recent projects. The residential area to the north was developed several decades ago, and has formed the southern limit of urban development since then. However, the lands to the east have been developed with visitor-serving uses over the past ten years, and the land south of the project site is under construction with a sports park. Development of the project site with urban uses would be consistent with the

adjoining development to the north and east. Although the character of the project site would change, the effect on aesthetics would be less than significant.

Refer to Section 2.4 Noise for a discussion of potentially significant secondary aesthetic effects resulting from noise mitigation, which could involve the construction of a sound wall in excess of seven feet tall.

Cultural Resources

A historic resources report prepared for the USA Amendment SEIR identified several houses south of the project site as potentially historic. An archival search indicated that an historic cabin (circa 1850) was located on the western end of the project site, but the December 1999 field visit by the historic consultant revealed that the site of the cabin is now vacant. The archeological resources investigation conducted for the USA Amendment SEIR did not reveal any surface evidence of cultural resources. Two recorded archaeological sites were noted within one half mile. However, it is possible that that construction of the proposed project could disturb unknown archaeological resources. This would be a potentially significant impact. Implementation of the following mitigation measure would reduce this impact to a less than significant level.

Mitigation Measures

18. Due to the possibility that significant buried cultural resources might be found during construction, the City of Gilroy shall ensure that the following language is included in any grading or construction documents issued for the proposed project that could include earth movement:

    If archaeological resources or human remains are discovered during construction, work shall be halted at a minimum of 200 feet from the find and the area shall be staked off. The project developer shall notify a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated and implemented.

19. In the event of an accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the City of Gilroy shall ensure that the following language is included in any grading or construction documents issued for the proposed school that could include earth movement in accordance with CEQA Guidelines section 15064.5(e):

    If human remains are found during construction there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the Gilroy Police Department has contacted the coroner of Santa Clara County to determine that no investigation of the cause of death is required. If the

coroner determines the remains to be Native American the coroner shall contact the Native American Heritage Commission within 24 hours. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descendent from the deceased Native American. The most likely descendent may then make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and associated grave goods as provided in Public Resources Code Section 5097.98. The landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further disturbance if: a) the Native American Heritage Commission is unable to identify a most likely descendent or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission; b) the descendent identified fails to make a recommendation; or c) the landowner or his authorized representative rejects the recommendation of the descendent, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

Geology and Soils

The project site is not identified as within an Alquist-Priolo Earthquake Fault Zone. The project site is within *Uniform Building Code* Seismic Zone 4, which is subject to potentially severe shaking during earthquakes. The project site is about four miles southwest of the Calaveras Fault, thee miles northeast of the Sargent Fault, and seven miles northeast of the San Andreas Fault. The project site soils are moderately susceptible to liquefaction. Building designs and engineering required under the *Uniform Building Code* and local amendments would provide reasonable protection for buildings and their inhabitants during earthquakes. The site is level and not subject to landslides. The project soils and topography do not result in a high risk of erosion. The project site is level and not suspected of being geologically unstable. The project site soils are moderately susceptible to liquefaction. The project site soils are moderately expansive. Standard building designs would address any issues related to expansive soils.

Hydrology and Water Quality

About four acres at the eastern end of the project site are within the FEMA 100-year flood zone, and subject to less than one foot of inundation during a 100-foot storm. This area may be developed with housing or commercial uses if the pad elevations are raised to at least one foot above flood elevation. Less than one acre in the south-central portion of the project site is within a recorded flood flowage easement, held by the Santa Clara Valley Water District. The flood flowage easement restricts uses in that area. Refer to Figure 7, Flood Flowage Easement, for a map of the flood zones associated with the project site and vicinity. Although residential uses would not be allowed, a park or street would be acceptable. The USA Amendment SEIR includes a mitigation

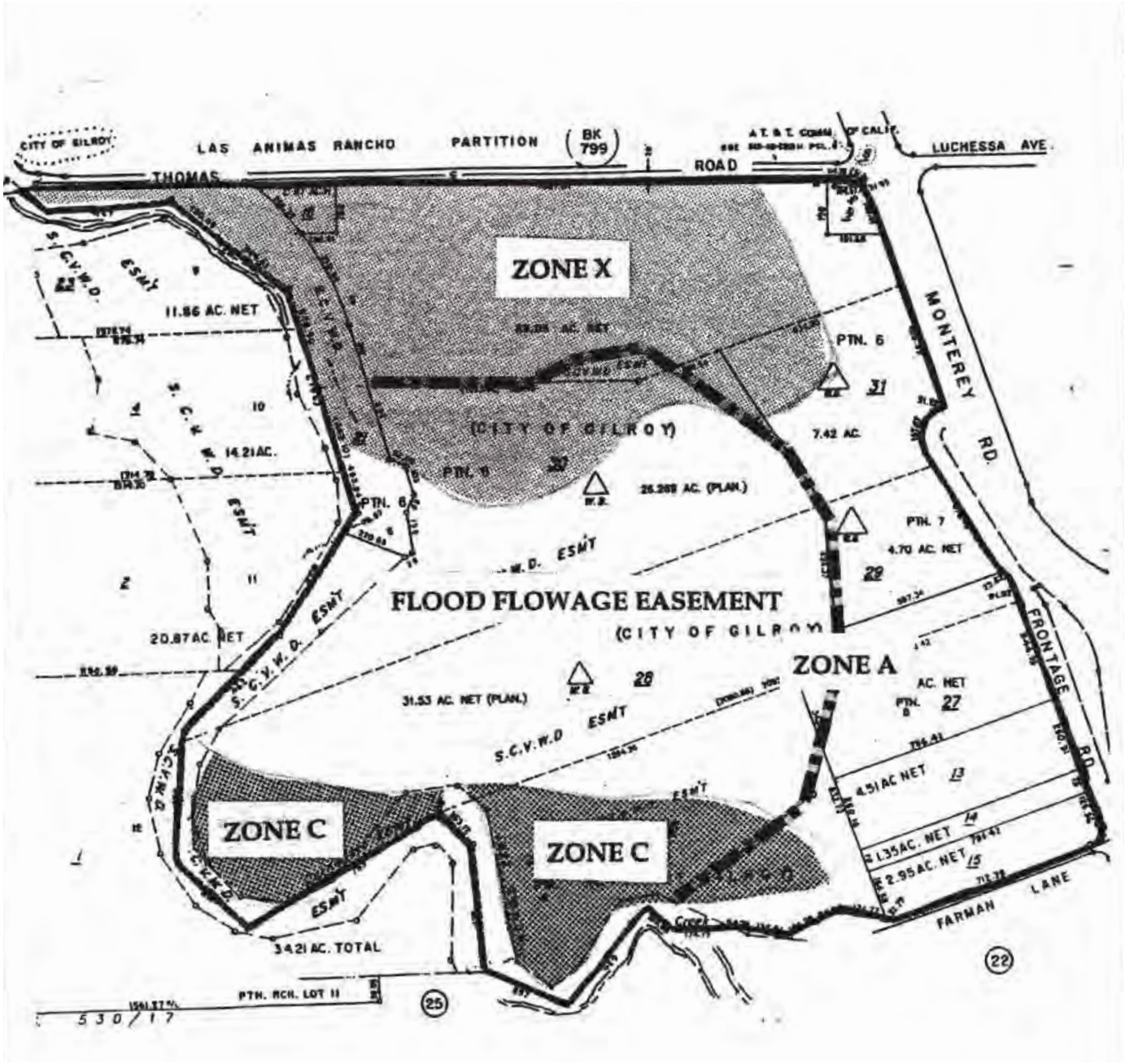
measure requiring preparation of a hydrologic study of areas within the 100-year flood zone or the flood flowage easement, prior to development. The hydrological study must show that a project will be consistent with the City's Flood Plain Control Ordinance, and not impede the flow of floodwaters, or increase off-site flooding levels. This mitigation measure would reduce potential flood impacts to a less than significant level.

Mitigation Measure

20. Prior to approval of a tentative map or architectural and site review for the area located within the flood zone, the applicant shall submit a hydrology report, prepared for the project by a qualified hydrologist or engineer, to address issues of site drainage, storm water run-off quantity and quality, and on-site storm water flow, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to issuance of a grading permit. All grading, design or other recommendations of this report shall be incorporated into project plans.

Urban contaminants from the proposed project could be transported to the drainage system, polluting downstream water systems. The potential for contamination exists during both the construction and operation of the proposed project. Siltation ponds and contaminant filters may be required to prevent urban pollutants from reaching Uvas Creek. Portions of the proposed project would involve grading and paving within the fold flowage easement or within 50 feet of the Uvas Creek levee. The Santa Clara Valley Water District (SCVWD) will review construction plans for any proposed development within the flood flowage easement to assure that proposed development will not have any detrimental effects on watercourses, habitat or animals. A SCVWD permit may be required for some of the construction work at the project site.

Development of the project site would increase the amount of runoff from the site under some weather conditions by adding new impervious surfaces and would generate non point source pollutants from newly established urban activity such as oil grease, fuel constituents, heavy metals, organic chemicals, bacteria and sediments. These pollutants would degrade the quality of the surface waters in Uvas Creek, Pajaro River and Monterey Bay. Introduction of pollutants into a watercourse is a significant environmental impact. With implementation of the following mitigation measures, water quality degradation would be reduced to a less than significant level.



0 400 feet

Source: FEMA 1998 Flood Rate Insurance Map and EMC Planning Group Inc. 2005

Figure 7

Flood Flowage Easement

Barberi Urban Service Area Amendment Subsequent EIR

E M C

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Mitigation Measures

21. The applicant shall be required to prepare storm drainage improvement plans for each project phase, subject to the review and approval of the City of Gilroy Engineering Division and SCVWD prior to approval of the final map. The storm drainage improvement plan shall be designed to maintain post-development run-off rates at or below existing run-off rates.

22. The applicant shall, for each phase of the project, submit a Notice of Intent (NOI) and detailed engineering designs to the Central Coast RWQCB. This permit shall require development and implementation of a SWPPP that uses storm water "Best Management Practices" to control runoff, erosion and sedimentation from the site. The SWPPP must include Best Management Practices that address source reduction and, if necessary, shall include practices that require treatment. The SWPPP shall be submitted to the City of Gilroy Engineering Division for review and approval prior to approval of a grading permit for each phase of the project.

23. For projects located within 50 feet of Uvas Creek, the applicant shall submit plans for review by, and obtain an approved permit from the Santa Clara Valley Water District (SCVWD) prior to approval of a grading permit.

Hazards and Hazardous Materials

The proposed project allows for residential and neighborhood commercial uses and would not involve the use or transport of significant quantities of hazardous materials. The nearest school is Gilroy High School, about four-tenths of a mile to the northwest. The project site is not a hazardous material site. The proposed project is consistent with the Gilroy general plan and would not affect emergency response plans. The project site is not in an area subject to wildland fires.

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3.0 Related Environmental Issues

3.1 Cumulative Impacts

CEQA Requirements

In accordance with CEQA Guidelines section 15130, an EIR must discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past project, current projects, and probable future projects. An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided for the impacts attributable to the proposed project alone.

CEQA Guidelines allow for one of two methods for determining cumulative projects. Either 1) a list of past, present, and probable future projects producing related or cumulative impacts; or 2) a summary of projections contained in an adopted general plan or in a prior environmental document which has been certified and described or evaluated regional or area-wide conditions contributing to the cumulative impact. The method utilized for each issue area is identified in the cumulative discussion of that issue.

This section discusses the potential for significant cumulative impacts in the areas of agriculture, air quality, biological resources, noise, public services and transportation/traffic.

Agricultural Resources

The *City of Gilroy General Plan EIR* considers the cumulative impact on agricultural resources (pages 4.4-1 through 4.4-27). The EIR concludes that the conversion of agricultural uses to urban uses from implementation of the draft general plan would cause loss of productive agricultural land, including prime farmland and farmland of statewide importance. This is considered a significant and unavoidable impact. In the evaluation of the loss of farmland, the General Plan EIR *did not* consider farmland that was already within the planning area and previously designated and zoned for urban

uses (such as the proposed project site). The EIR analysis focused on the net acreage of farmland to be added to the general plan planning area, which was 952 acres, the majority of which (70 percent) was subsequently designated for campus industrial and open space east of the Gilroy outlets (page 4.4-17, as amended by the December 6, 2001 Amendment to the Draft EIR for the general plan). About 381 acres of this farmland is considered to be prime farmland. The total loss of this agricultural land is considered a significant and unavoidable impact.

To reduce the severity of this impact, the City of Gilroy adopted agricultural mitigation measure 4.4-A and a strategies document created by a joint group of agency staff from the City, County, and LAFCO. Mitigation measure 4.4-A requires contributions by applicants to a program to preserve open space and off-set the loss of agricultural land. In addition, there are 27 policies and 14 implementing actions in the general plan that serve to further mitigate impacts from conversion of agricultural lands to urban uses (*City of Gilroy General Plan EIR*, p 4.4-24). However, the City Council found that, even with implementation of these mitigation measures, policies, and implementation measures, the impacts associated with farmland conversion were still significant and unavoidable.

The general plan EIR concluded that implementation of the general plan would, by causing loss of productive agricultural land, including Prime Farmland and Farmland of Statewide Importance, result in a significant and unavoidable impact. This impact was based upon agricultural losses anticipated to occur to the east and southeast of Gilroy, although not including the project site. The general plan EIR in section 4.4-17, Agriculture, notes that the majority of the remaining prime agricultural land in the County is located to the east and southeast of the Gilroy planning area. The project site was not considered to contribute to the loss of agricultural lands identified in the general plan EIR because it was already within general plan planning area and designated urban development.

However, the project site-specific LESA analysis, included in Section 2.2, Agricultural Resources, of this draft EIR, was conducted to determine the significance of the conversion of the project site from farmland to urban uses. That analysis concluded that conversion of this site to urban uses is considered a significant adverse environmental impact, even with the implementation of the City's agricultural mitigation policy. Therefore, because the project-level impact is considered significant, the proposed project's contribution to the loss of important farmland in the region is considered cumulatively considerable and unavoidable. Approval of the proposed project would require adoption of a statement of overriding considerations.

Air Quality

Cumulative air quality analysis is typically based on the consistency of a project with the BAAQMD *2000 Clean Air Plan*. In this case, the *Gilroy Revised General Plan EIR* determined that the Gilroy general plan was not consistent with the BAAQMD *2000 Clean Air Plan*. Therefore, a project that is consistent with the Gilroy General Plan is determined to be inconsistent with the *2000 Clean Air Plan* as well.

Measures to achieve reductions in air emissions typically center on reducing automobile trips. The *Gilroy Revised General Plan EIR* concluded that build-out of the general plan would result in significant and unavoidable impacts to air quality from vehicle emissions, and a statement of overriding considerations was adopted when the *Gilroy Revised General Plan EIR* was certified. The proposed project would contribute to significant unavoidable cumulative air quality impacts.

Biological Resources

The analysis of cumulative biological impacts is based on the analysis of the *Gilroy Revised General Plan EIR*. The *Gilroy Revised General Plan EIR* determined that projects along creeks could result in cumulatively significant effects on biological and aquatic resources associated with creeks and drainages. The proposed project could contribute to cumulative impacts on biological resources throughout the city. The project is, however, consistent with the general plan, and the regional and area-wide cumulative biological impacts of the project have been adequately addressed in the *Gilroy Revised General Plan EIR* since those impacts have been mitigated or avoided as a result of the *Gilroy Revised General Plan EIR* and the associated findings of approval for the general plan.

Noise and Associated Aesthetics Impacts

The cumulative noise analysis is based on cumulative vehicular traffic levels. Vehicular traffic would be the main source of project-generated noise, as well as the main source of exterior noise affecting the project site. The *Noise Assessment Study for the Barberi Urban Service Area Amendment* identified several cumulative noise impacts in relation to the centerlines of Monterey Road and Luchessa Avenue. As traffic increases under general plan build-out conditions, noise levels at the project site will continue to rise, and the acceptable noise level contour will move farther onto the project site. Cumulative increases in traffic noise will also affect existing residences to the north of Luchessa Avenue. Refer to Table 17, Cumulative Noise Exposure along Monterey Road, and Table 18, Cumulative Noise Exposure along Luchessa Avenue for a summary of the cumulative noise contour locations along these two roads. Project level noise analysis assumes the sport park is in operation, and no further increases in sports park noise would occur under cumulative conditions.

At locations where noise levels would exceed the City's noise standards, (60 dB $_{DNL}$ exterior for residences, and 65 dB $_{DNL}$ exterior for commercial uses), a significant cumulative effect would result. The mitigation measures presented in Section 2.4 Noise, that reduce project noise effects to a less than significant level would also reduce cumulative noise effects to a less than significant level. However, implementation of the noise mitigation measures (construction of nine-foot high sound walls) would result in significant visual impacts.

TABLE 17

Cumulative Noise Exposure along Monterey Street

Distance from Source	dB L_{DN}
75 feet	70
95 feet	70
220 feet	65
470 feet	60

Source: Edward L. Pack Associates, Inc.

TABLE 18

Cumulative Noise Exposure along Luchessa Avenue

Distance from Source	dB L_{DN}
40 feet	69
48 feet	70
110 feet	65
235 feet	60

Source: Edward L. Pack Associates, Inc.

Public Services

Police Services

The cumulative police services analysis is based on the analysis in the *Gilroy Revised General Plan EIR*. Cumulative development in the City will place additional demands on City police services. The payment of public safety impacts fees by the project and cumulative projects would fund the police facilities and equipment necessary to offset the additional demands on needed to adequately serve cumulative development. The proposed project is consistent with the general plan and the citywide cumulative police services impacts of the proposed project have been mitigated or avoided as a result of the *Gilroy Revised General Plan EIR* and associated mitigation measures and findings.

Fire Services

The cumulative fire services analysis is based on the analysis in the *Gilroy Revised General Plan EIR*. Cumulative development in the City will place additional demands on City fire services. The *Gilroy Fire Services Master Plan* includes construction of a new fire station in the Glen Loma Specific Plan area west of the project site. This fire station will address fire services needs at the project site and the surrounding areas of southern Gilroy. The payment of public safety impacts fees by the project and cumulative projects would fund the fire facilities and equipment necessary to offset the additional demands on needed to adequately serve cumulative development. The proposed project is consistent with the general plan and the citywide cumulative fire services impacts of the proposed project have been mitigated or avoided as a result of the *Gilroy Revised General Plan EIR* and associated mitigation measures and findings.

Schools

The cumulative schools analysis is based on the analysis in the *Gilroy Revised General Plan EIR*. The proposed project, along with cumulative development, would cause an increase in school enrollment. Each development would pay school impact fees in accordance with the requirements of SB50, which would reduce impacts on schools to a less than significant level. Through the payment of fees, the proposed project would not result in a cumulatively considerable impact on schools. The project is consistent with the general plan and the citywide cumulative school impacts of the proposed project have been mitigated or avoided as a result of the *Gilroy Revised General Plan EIR* and associated mitigation measures and findings.

Parks

The cumulative parks analysis is based on the analysis in the *Gilroy Revised General Plan EIR*. The proposed project and cumulative development would increase the demand for city parks and related recreational services. The *Gilroy Revised General Plan EIR* and the *Gilroy Parks and Recreation Master Plan* establish a standard of five acres of parkland per thousand residents. The City requires dedication of parkland or the payment of fees in conjunction with the subdivision of land. Through the dedication of parkland and/or payment of fees, the proposed project would not result in a cumulatively considerable impact on parks. The project is consistent with the general plan and the citywide cumulative parks impacts of the proposed project have been mitigated or avoided as a result of the *Gilroy Revised General Plan EIR* and associated mitigation measures and findings.

Transportation/Traffic

Cumulative traffic conditions are defined as existing volumes plus traffic generated by approved but not yet constructed developments, plus project generated traffic, plus traffic associated with pending developments in the study area. Traffic volumes under this scenario were estimated by adding traffic associated with pending development to traffic

volumes estimated for project conditions. A list of cumulative projects is included in the traffic impact analysis, in Appendix G. The operation of the key intersections were evaluated with level of service calculations and the results are presented in Table 19 Cumulative Intersection Levels of Service. The addition of traffic associated with pending projects is projected to cause the overall or worst movement/approach for both unsignalized intersections to be LOS F. The signalized Monterey Street intersections operate acceptably at LOS D or better during the AM peak; however, in the evening they degrade to LOS F and E- at Luchessa Avenue and Tenth Street, respectively.

TABLE 19

Cumulative Traffic Conditions
Intersection Levels of Service

Intersection	Peak Hour	LOS
Luchessa Avenue/Thomas Road	AM	F
	PM	F
Luchessa Avenue/Princevalle Street	AM	F
	PM	F
Luchessa Avenue/Monterey Street	AM	D
	PM	F
Monterey Street/Tenth Street	AM	C
	PM	E

Source: Fehr & Peers Associates

Significant Impact - Luchessa Avenue/Thomas Road Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during both peak hours. City staff has discussed the implementation of a traffic signal or roundabout at the Luchessa Avenue/Thomas Road intersection. This improvement would result in LOS A (7.6 seconds of delay) and LOS C (23.7 seconds of delay) under cumulative conditions during the AM and PM peak hours, respectively. Implementation of the mitigation measure presented below would reduce cumulative impacts to a less than significant level.

Significant Impact - Luchessa Avenue/Princevalle Street Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during both peak periods. Signalization of this intersection would result in LOS B+ during both peak hours. Implementation of the mitigation measure presented below would reduce cumulative impacts to a less than significant level.

Significant Impact - Monterey Street/Luchessa Avenue Cumulative Conditions. Under cumulative conditions this intersection would operate at unacceptable LOS F during the PM peak hour. The *City of Gilroy Traffic Circulation Master Plan* designates Luchessa Avenue to provide four lanes along the project frontage. As identified in the Capital Improvement Budget Plan the eastbound approach of this intersection provides one left-turn lane, two through lanes, and one separate right-turn lane. The planned improvements would not result in acceptable levels of service at cumulative conditions. Implementation of the mitigation measure presented below would reduce cumulative impacts to a less than significant level.

Significant Impact - Monterey Street/Tenth Street Intersection. Under cumulative conditions, this intersection would operate at unacceptable level of service (LOS E-) during the PM peak hour. Implementation of the mitigation measure identified Section 2.6 Traffic/Transportation would partly reduce this impact, but not to a less than significant level. The cumulative impact at the Monterey Street/Tenth Street intersection would be mitigated with the implementation of a second southbound left-turn lane, a westbound overlap phase, and providing one left-turn lane, two through lanes, and one separate right-turn lane would result in LOS D (48.6 seconds of delay) during the PM peak hour under cumulative conditions. This mitigation would likely require some right-of-way to accommodate this improvement. Therefore, an engineering study needs to be completed to determine the extents of the roadway that may be required to implement this improvement. Implementation of the mitigation measure presented below would reduce cumulative impacts to a less than significant level.

Mitigation Measure

24. If the following improvements, or equivalent as determined by the Gilroy Engineering Division, are not included in the City's traffic fee program at the time traffic impact fees are paid, the developer shall pay a pro-rata share of the cost of each improvement not included in the fee program in addition to standard traffic impact fees. The project that triggers unacceptable levels of service at these locations will be required to design and construct the improvements and submit their costs to the City for reimbursement our of the traffic impact fee program funds.

    1. Luchessa Avenue and Thomas Road: a traffic signal or traffic circle;

    2. Luchessa Avenue and Princevalle Street: a traffic signal;

    3. Monterey Street and Luchessa Avenue: an additional northbound left-turn lane and widening of the west leg to provide two receiving lanes for the northbound left-turning vehicles;

    4. Monterey Street and Tenth Street: a second southbound left-turn lane, a westbound overlap phase, one left-turn lane, two through lanes, and one separate right-turn lane on northbound Monterey Street.

The development that triggers the improvements is responsible for the design and construction of the mitigation measure. If the improvements are traffic impact fee related, the developer will be reimbursed based on City procedures.

Utilities and Service Systems

Wastewater Treatment

The cumulative wastewater treatment analysis is based on the analysis in the *Gilroy Revised General Plan EIR*. The *City of Gilroy Sewer Master Plan* is consistent with the general plan land use designations, and based on general plan build-out. Therefore, the sewer master plan presents the cumulative scenario, and the sewer demand that would be generated by the cumulative development would be within the range planned for the City's sewer facilities. Cumulative development is assumed consistent with the current general plan land use designations. The proposed project is consistent with the general plan and the citywide cumulative wastewater treatment impacts of the proposed project have been mitigated or avoided as a result of the *Gilroy Revised General Plan EIR* and associated mitigation measures and findings.

Water Supply

The cumulative water supply analysis is based on the analysis in the *Gilroy Revised General Plan EIR*. The *City of Gilroy Water System Master Plan* and *City of Gilroy Urban Water Management Plan* are consistent with the general plan land use designations, and is based on general plan build-out. Therefore, the water plans present the cumulative scenario, and the water demand from cumulative development would be within the range planned for by the City. The City of Gilroy has planned for an adequate supply of potable water available to meet the City's cumulative development. The proposed project is consistent with the general plan and the citywide cumulative water supply impacts of the proposed project have been mitigated or avoided as a result of the *Gilroy Revised General Plan EIR* and associated mitigation measures and findings.

Landfill Capacity

The cumulative landfill capacity analysis is based on the analysis in the *Gilroy Revised General Plan EIR*. The City's solid waste disposal planning considers the planned development as outlined in the general plan. The recycling opportunities available throughout the City of Gilroy would be available to cumulative development. The proposed project is consistent with the general plan and the citywide cumulative landfill capacity impacts of the proposed project have been mitigated or avoided as a result of the *Gilroy Revised General Plan EIR* and associated mitigation measures and findings.

3.2 Growth Inducing Impacts

CEQA Requirements

CEQA Guidelines section 15126.2 (d) requires a discussion of the growth-inducing impacts of a proposed project. Growth inducement refers to the likelihood that a proposed project will foster economic or population growth in the surrounding area, either directly or indirectly. The most common factor in fostering growth is the removal of obstacles to population or economic growth. Potential growth-inducing impacts must be discussed in relation to both the potential impacts on existing community service facilities and the way a project may encourage and facilitate other activities that could significantly affect the environment. It must not be assumed that growth in any area is necessarily beneficial, detrimental or of little significance to the environment.

Proposed Project Growth Inducement

The proposed project itself is an extension of urban services into an area not previously provided with such services. Although all urban service infrastructure is currently available near the project site, the approval of the USA amendment would make that infrastructure available to the project site and would result in future growth and development in that area. The project site is currently within the City of Gilroy 20 year development area. The proposed project would bring the project site within the City of Gilroy USA. Extension of services to the project site, in conjunction with development of the Gilroy Sports Park, could result in development pressures on other parcels to the south of the project site. Consequently, the proposed project could have a growth inducing impact.

3.3 Unavoidable Significant Adverse Environmental Impacts

CEQA Requirements

An unavoidable significant adverse environmental impact is a significant adverse impact that cannot be reduced to a less than significant level through the implementation of mitigation measures. CEQA Guidelines section 15093 requires that a lead agency make findings of overriding considerations for unavoidable significant adverse environmental impacts before approving a proposed project.

CEQA Guidelines section 15093(a) requires the decision-making agency (the City of Gilroy) to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered

"acceptable." CEQA Guidelines section 15093(b) states that when the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

Agricultural Resources

The proposed project would result in the loss of 27.7 acres of prime farmland with a LESA score that indicates agricultural land of significant value. This would be a significant project and cumulative impact. Implementation of the City's Agricultural Mitigation Policy would be required, but would not reduce the impact to a less than significant level. A statement of overriding considerations would have to be adopted by the City of Gilroy if the proposed project is approved.

Air Quality

The proposed project would contribute to significant and unavoidable cumulative air quality impacts. These unavoidable impacts were described in the *Gilroy Revised General Plan EIR,* and a statement of overriding considerations was adopted when the City Council certified the *Gilroy Revised General Plan EIR.* A statement of overriding considerations would have to be adopted by the City of Gilroy if the proposed project is approved.

Aesthetics

Project and cumulative traffic along Luchessa Avenue would increase noise levels at existing residences to a significant degree above existing noise levels. This would be a significant noise impact. While a mitigation measure is available to reduce this noise impact to a less than significant level, the mitigation measure would result in a secondary aesthetic impact that would be significant and unavoidable. The proposed project would result in a significant and unavoidable visual or aesthetics impact relating to the construction of nine-foot high sound walls. A statement of overriding consideration would be required, if the City approves the proposed project.

3.4 Alternatives

CEQA Requirements

CEQA Guidelines section 15126.6 (a) requires a description of reasonable alternatives to the project, or to the location of the project, which could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and an evaluation of the comparative merits of the alternatives. An

EIR need not consider every conceivable alternative to the project, but must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. CEQA Guidelines section 15126 (b) further requires that the discussion of alternatives focus on those alternatives capable of eliminating any significant adverse environmental impacts or reducing them to a level of insignificance, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.

CEQA Guidelines section 15126 (e) stipulates that a "no project" alternative be evaluated along with its impacts. The "no project" alternative analysis must discuss the existing conditions, as well as what would reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

Alternatives Analyzed

The following three project alternatives were analyzed:

- "no project" alternative;
- "alternate location" in northern Gilroy; and
- "increased commercial" alternative.

The comparative merits of the alternatives are evaluated at the end of this section in terms of the areas of concern addressed in the EIR. The environmentally superior alternative is identified and discussed. The attainment of project objectives is also considered.

Alternative #1 – No Project Alternative

The "no project" alternative occurs if the City or Santa Clara County LAFCO denies the request for a USA amendment for the project site. In this circumstance, no development would take place on the project site and the project site would remain within unincorporated Santa Clara County as primarily agricultural land.

Agricultural Resources

With the "no project" alternative, the land would remain available for farming on prime agricultural land. The "no project" alternative is superior to the proposed project in terms of agriculture.

Air Quality

The "no project" alternative would result in no additional emissions from vehicular trips. The "no project" alternative would not result in construction emissions, and

operational emissions would be minimal. The "no project" alternative is superior to the proposed project in terms of air quality.

Biological Resources

The "no project" alternative would have no impact on any sensitive habitat or wildlife. The "no project" alternative is superior to the proposed project in terms of biological resources.

Noise

The "no project" alternative would not expose new residences to noise, nor would it result in significant short-term or long-term noise generation. The "no project" alternative would be superior to the proposed project in terms of noise.

Public Services

With the "no project" alternative Santa Clara County would continue to provide police and fire services to the project site. There would be no new development on the project site, so the level of police and fire services required would remain very low. The "no project" alternative would not increase the demand on parks nor generate any students. The "no project" alternative would be superior to the proposed project in terms of public services.

Transportation/Traffic

The "no project" alternative would not add any vehicular trips to the roadway network. The "no project" alternative would have no impact on traffic. The "no project" alternative would be superior to the proposed project in terms of transportation/traffic.

Utilities and Service Systems

The "no project" alternative would not result in need for additional wastewater or water services from the City. The "no project" alternative would not require any landfill capacity. The "no project" alternative would be superior to the proposed project in terms of utilities and service systems.

Alternative #2- Alternate Location

The alternate location is along the west side of Monterey Street near Cohansey Avenue. Figure 8, Alternative Location, shows the alternative location. The alternate location is comprised of six parcels with a total of 34.7 acres. The alternate location is within the Gilroy USA and city limits. Most of the alternate location is designated Neighborhood District in the general plan. The southeastern corner (about two acres) is designated General Services Commercial. Although the alternate location is about five acres larger than the project site, almost half of this difference is a SCVWD parcel with a drainage



0 500 feet

Legend

Alternative Site

Source: EMC Planning Group Inc. 2005, City of Gilroy 2004

Figure 8

Alternate Location

Barberi Urban Service Area Amendment Subsequent EIR

E M C

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channel, so the developable acreage is only about three acres greater. For this analysis, it is assumed that the alternate location would be developed with the same number of residential units, in a mix of residential densities similar to the proposed project within the Neighborhood District area, and with the same areas of neighborhood-serving types of commercial uses within the General Services Commercial area.

The alternate location is partly developed with houses, small commercial uses, and agricultural buildings. Part of the site is in hay or pasture. No crops are grown on the site. Recent residential developments are nearby to the south and west. A SCVWD canal crosses north-south through the site. Access is presently available from Monterey Street and the northern ends of Church Street and Wren Avenue, Cohansey Avenue is planned to extend through the northern portion of the site.

Agricultural Resources

The alternate location is on land designated as Urban and Built Up Land on the *Important Farmlands Map for Santa Clara County*. It would not convert prime agricultural land to urban uses, and is already within the Gilroy USA. The alternate location would be superior to the proposed project in terms of agricultural considerations.

Air Quality

The "alternate location" alternative would result in similar traffic generation, so operation emissions would be similar. The alternate location would be consistent with the general plan and consequently inconsistent with the BAAQMD *Clean Air Plan*. The "alternate location" alternative would result in similar construction emissions. The "alternate location" alternative would be similar to the proposed project in terms of air quality impacts.

Biological Resources

The alternate location is adjacent to areas of development, and the project site itself is partly developed and partly in hay production. The site is bisected by a Santa Clara Valley Water District drainage channel with much less biological resource value than Uvas Creek. The potential for burrowing owls exists on the site, but effects on other biological resources or natural habitat along waterways is are not likely. The alternate location would be similar to the proposed project in terms of biological resources.

Noise

The alternate location is along a section of Monterey Street that currently has less traffic than the project site, although at general plan build out there will be considerably more traffic in this area. Cohansey Avenue would be constructed through the northern side of the site and eventually connect to Santa Teresa Boulevard as an arterial. Therefore, the

noise environment could be similar to that of the project site, however, a site-specific noise study would be required to make a final conclusion.

Public Services

The alternate location is already within the City of Gilroy and receives police and fire services from the Gilroy Police and Fire departments. Although the site is within the service area of the City, because the site is currently only lightly developed, call rates to the site would increase. As is the case with the proposed project, impacts fees would be paid to off set the costs of increased demand. The alternate location is already within the City's service area, and the City has already anticipated serving the site to a greater degree as development occurs. Therefore, the alternate location would be superior to the proposed project in terms of public services.

Transportation/Traffic

The alternate location would generate a similar number of vehicular trips to the proposed project. The alternate location traffic would likely use the lightly used Buena Vista Avenue to access northbound U.S. Highway 101, but the heavily used Leavesley Road to access southbound U.S. Highway 101. There are no bicycle paths or lanes near the alternate site. The alternate location would generate similar traffic levels, and would be similar to the proposed project from a traffic impact standpoint.

Utilities and Service Systems

The alternate location is currently within the City of Gilroy and can receive City water and wastewater services, although most of the parcels in the alternate location may not be currently served. The alternate location would use similar quantities of water, and produce similar quantities of wastewater compared to the proposed project. The City provides utilities to nearby residential development to the south and west. The City has adequate capacity to serve the site. Because the alternate location is within the City limits, it has already been planned for services by the City, and would be superior to the proposed project in terms of utilities and service systems.

Alternate #3 – "Reduced Residential/Additional Commercial" Alternative

The "reduced residential/additional commercial" alternative would decrease the number of single-family residences and increase the amount of commercial uses. The commercial area would be increased to about 38,000 square feet, on about three acres, and would be expanded westward along Luchessa Avenue to the intersection with Hyde Park Street. The main entrance to the commercial area would be from the extension of Hyde Park Street. The single-family residential would be reduced to about 200 units, and the high density residential would remain at 30 units. The "reduced residential/additional commercial" alternative was selected because the City has about 11 years of available residential land within the urban service area.

Agricultural Resources

Conversion of prime farmland would be the same as with the proposed project. The "additional commercial" alternative and the proposed project would be the same in terms of loss of agricultural land.

Air Quality

About 40 percent more traffic would be generated by the "additional commercial" alternative. The "additional commercial" alternative would result in increased emissions compared to the proposed project. This could be partly off-set by reduced trips from residences due to additional choice in nearby services, but not to the extent that emissions would be significantly reduced. Construction period emissions would be similar. The "additional commercial" alternative would be inferior to the proposed project.

Biological Resources

The "additional commercial" alternative would have the same effects on biological resources as the proposed project. The "additional commercial" alternative and the proposed project would be the same in terms of biological resources.

Noise

The "additional commercial" alternative would place more commercial uses in the noisier portions of the project site. Because commercial uses have a higher threshold for acceptable noise, this would reduce the extent of noise impacts on project uses. Noise issues would remain for the western portions of the project site along Luchessa Avenue, and for the existing residences to the north of Luchessa Avenue. The "additional commercial" alternative would be similar to the proposed project in terms of noise.

Public Services

Demand for police and fire services would be similar in the "additional commercial" alternative. Commercial uses would be expanded, so additional sales tax revenues would be available to fund capital improvements. Demand for parks and schools would be reduced due to the reduction in residences. The "additional commercial" alternative would be superior to the proposed project in terms of public services.

Transportation/Traffic

The "additional commercial" alternative would result in about a 40 percent increase in traffic. The additional volumes may result in further reductions in LOS at nearby intersections. The expansion of the commercial provides a superior entry location for commercial, and may incrementally increase the number of non-auto trips by placing the commercial closer to residences and expanding the nearby choices. However, overall

the "additional commercial" alternative would be inferior to the proposed project in terms of traffic.

Utilities and Service Systems

The "additional commercial" alternative would produce about the same amount of wastewater as the proposed project, (0.039 mgd compared to 0.040 mgd), but would require more water than the proposed project (0.056 mgd compared to 0.046 mgd). Therefore the "additional commercial" alternative would have a greater effect on water supply and would be inferior to the proposed project in terms of utilities and service systems.

Evaluation of Alternatives

CEQA Guidelines section 15126.6 (d) requires the EIR to present enough information about each alternative to allow meaningful evaluation, analysis and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed. CEQA Guidelines section 15126.6(e) requires the selection of an environmentally superior alternative. If the "no project" alternative is the environmentally superior alternative, then the environmentally superior alternative amongst the remaining alternatives must be identified. The alternatives are summarized and compared in a matrix format in Table 20, Alternatives Comparison.

The "no project" alternative would be the superior alternative, because by keeping the project site in its current agricultural uses there would be no significant environmental impacts. The second environmentally superior alternative would be the alternate location because the loss of prime farmland would be avoided, and the location within the urban service area and City limits is already planned for near term expansion of City services and utilities.

TABLE 20

Alternatives Comparison

Issue Area	Proposed Project	No Project	Alternate Location	Increased Commercial
Agricultural Resources	Significant Unavoidable	Superior	Superior	Same/Similar
Air Quality	Potentially Significant	Superior	Same/Similar	Inferior
Biological Resources	Potentially Significant	Superior	Same/Similar	Same/Similar
Noise	Potentially Significant	Superior	Same/Similar	Same/Similar
Public Services	Less Than Significant	Superior	Superior	Superior
Transportation / Traffic	Potentially Significant	Superior	Same/Similar	Inferior
Utilities and Service Systems	Less Than Significant	Superior	Superior	Inferior
RANK		1	2	3

Source: EMC Planning Group Inc.

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4.0 Literature Cited, Persons Contacted, Report Preparers

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Most documents listed are available for review at the City of Gilroy Community Development Department, 7351 Rosanna Street, Gilroy, (408) 846-0440 during normal business hours. All documents listed are available for review at EMC Planning Group, Inc., 301 Lighthouse Avenue, Suite C, Monterey, California 93940, (831) 649-1799 during normal business hours.

4.2 Persons Contacted

Cydney Casper, Planner II, City of Gilroy Planning Division

Jackie Bretschneider, Fire Marshal, City of Gilroy

David Fairley , Bay Area Air Quality Management District

Jeff Pack, Edward L. Pack and Associates

Jason Nesdahl, Traffic Engineer, Fehr & Peers Associates, Inc.

Charlie Van Meter, Gilroy Unified School District

4.3 Report Preparers

EMC Planning Group Inc.

Teri Wissler Adam, Principal
Principal-in-Charge

Richard James, AICP, Principal Planner
Project Management and Report Preparation

Janet Ilse, Biologist/Senior Planner
Report Preparation and Biology

Guido F. Persicone, Assistant Planner
Report Preparation and Graphics

E. J. Kim, Desktop Publishing Specialist
Report Production

Fehr & Peers Associates, Inc.

Jason Nesdahl, Transportation Engineer

Transportation Impact Analysis, Report Preparation

Applied Development Economics

Doug Svensson, Principal

Fiscal Analysis, Report Preparation

Edward L. Pack & Associates

Jeffery K. Pack, President

Noise Assessment Study

Appendix A

NOP and Response to the NOP

NOTICE OF PREPARATION
OF A
DRAFT ENVIRONMENTAL IMPACT REPORT

Barberi USA Amendment
(Gilroy USA Amendment 04-02)

In accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21080.4 and the State CEQA Guidelines §15082, the City of Gilroy acting as the Lead Agency will be preparing an Environmental Impact Report (EIR) for a 27.7-acre amendment to the City's Urban Service Area (USA) to include Assessor's parcel numbers 808-21-008, 808-21-009, 808-21-016, and 808-21-018, at the southwest corner of Monterey Road and Luchessa Avenue.

The City of Gilroy wants to know your views as to the scope and content of the environmental information that should be addressed in the EIR in connection with the proposed project. A more detailed description of the proposed project and the proposed scope of the EIR, including a list of probable environmental impacts is presented in the attached summary and initial study.

Due to time limits mandated by state law, your response must be sent no later than 30 days after receipt of this Notice of Preparation. If you wish to comment on the contents of the upcoming EIR, or obtain files relating to the project, please send your comments or requests to:

Cydney Casper, Planner II
City of Gilroy Planning Division
7351 Rosanna Street
Gilroy, CA 95020
Tel: (408) 846-0440
Fax: (408) 846-0429

You are invited to attend a public scoping meeting that will be held on May 17, 2005 at 5:00 PM at the City of Gilroy City Hall Council Chambers. See address above.

Summary

This attachment provides a summary of anticipated environmental effects that will be studied in detail in the EIR. For additional information, refer to the attached initial study.

Project Description

The proposed project is an amendment to the City of Gilroy USA to include a 27.7-acre area with a *Gilroy General Plan* land use designation of Neighborhood District. The project site would be pre-zoned to a residential district. Probable residential build-out would be 173 units at various densities, based on the *Gilroy General Plan* Neighborhood District land use development targets.

Probable Environmental Effects

Based upon the analysis done for the attached Initial Study, the City has determined that an EIR should be prepared to further study the following environmental issues: loss of agricultural land; aesthetics; air quality; biological resources; noise; public services and utilities; and traffic impacts.

Agricultural Resources

The California Department of Conservation Important Farmland Map for Santa Clara County (2002) identifies the project site as prime agricultural land. The proposed project would result in the conversion of prime agricultural land to urban uses. Though this issue was addressed in the *Gilroy USA Amendment 98-03 Subsequent EIR* and the *Gilroy General Plan EIR* the project specific impact of this conversion will be assessed to ensure the issue is addressed according to existing CEQA statutes and guidelines, as well as the City of Gilroy adopted methodology for evaluation impacts to prime farmland. The Land Evaluation and Site Assessment (LESA) model will be used to evaluate the project's impact on prime farmland.

Aesthetics

The project site is located along southern Monterey Road, one of the City gateways identified in the *Gilroy General Plan.* The *Gilroy USA Amendment 98-03 Subsequent EIR* analyzed residential development on the project site. Because noise levels could be in excess of City standards, an eight-foot sound wall could be required to reduce noise levels at residences along Luchessa Avenue to acceptable levels. Dependant on

the results of the new noise study, and mitigation measures proposed by the new noise study, the EIR may examine the effects of sound walls on aesthetics.

Air Quality

The proposed project will generate a significant number of vehicle trips and would also be the source of short-term, construction-related air emissions. The project site is located within the San Francisco Bay Area, which is in moderate non-attainment for the federal 1-hour ozone standard and the State ozone standard. The air basin is also in non-attainment of the State standard for fine particulate matter (PM_{10}). Project-specific air quality impacts will be analyzed in the context of the findings for prior environmental documents and based on results of the URBEMIS2002 air emissions modeling software, which will be run to evaluate operational emissions generation from the project.

Biological Resources

Biological resources were evaluated during preparation of the *Gilroy USA Amendment 98-03 Subsequent EIR* in April 2000. A new biological resources assessment will be prepared due to possible changes in the resources at, and adjacent to the site, as well as changes in regulations. The California tiger salamander is known to occur within one mile of the site, and is now a federally listed species.

Noise

The *Gilroy USA Amendment 98-03 Subsequent EIR* determined that there could be significant noise impacts at the project site, from traffic along Monterey Road and Luchessa Avenue, and from activities at the sports park. Noise from construction activities could affect nearby residences. The City has adopted new noise standards since the *Gilroy USA Amendment 98-03 Subsequent EIR* was certified. A new noise study will be prepared and the EIR will re-evaluate noise impacts.

Public Services and Utilities

Since certification of the *Gilroy USA Amendment 98-03 Subsequent EIR*, the City has adopted a new General Plan a new Fire Services Master Plan, and several master utility plans. The EIR will re-evaluate the provision of public services and utilities to the proposed project.

Transportation/Traffic

The proposed project would generate a large number of vehicle trips, potentially affecting the local and regional roadways. A traffic impact analysis will be prepared to study the proposed project effects at seven intersections and along six road and highway segments. The EIR will analyze potential traffic effects.

Other Environmental Effects

It is expected that other environmental effects will be found to be less than significant or previously mitigated based on the previously certified *Gilroy USA Amendment 98-03 Subsequent EIR* or the *Gilroy General Plan EIR*. It is anticipated that impacts for these issues can be mitigated to a less than significant level through the implementation of standard conditions of approval or standard mitigation measures, or measures previously presented in the previously certified environmental documents. The previous environmental review of these issues will be summarized, and the applicable mitigation measures from the earlier environmental documents presented.

INITIAL STUDY

BARBERI URBAN SERVICE AREA AMENDMENT

Gilroy USA Amendment 04-02

PREPARED FOR

City of Gilroy

April 28, 2005

BARBERI URBAN SERVICE AREA AMENDMENT

Initial Study

Gilroy USA Amendment 04-02

PREPARED FOR

City of Gilroy
Cydney Casper, Planner II
7351 Rosanna Street
Gilroy, CA 95020
408.846.0400

PREPARED BY

EMC Planning Group Inc
301 Lighthouse Avenue Suite C
Monterey CA 93940
Tel 831.649.1799
Fax 831.649.8399
contactus@emcplanning.com
www.emcplanning.com

April 28, 2005

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A. Background

Project Title	Barberi Urban Service Area (USA) Amendment Gilroy USA 04-02
Lead Agency Contact Person and Phone Number	Cydney Casper, Planner II City of Gilroy Community Development Department Planning Division (408) 846-0440
Date Prepared	April 28, 2005
Study Prepared by	EMC Planning Group Inc. 301 Lighthouse Avenue, Suite C Monterey, CA 93940 Richard James, AICP, Senior Planner
Project Location	South of Luchessa Avenue, west of Monterey Road, north of the City's planned and partially constructed sports park, and east of Uvas Creek, in Santa Clara County adjacent to the Gilroy City limits. APNs: 808-21-008, 808-21-009, 808-21-016, 808-21-018. Figure 1 shows the regional location. Figure 2 shows the project vicinity.
Project Sponsor Name and Address	Richard Barberi 240 Noelle Court Hollister, CA 95023
General Plan Designation	Neighborhood District
Zoning	Currently Santa Clara County A-20; Pre-zone to Neighborhood District

Setting

The proposed amendment area ("project site") consists of four parcels predominantly in agricultural use. A parcel on the northeast corner of the project site contains a propane gas facility. To the north of the project site are single-family residences, to the east motels and restaurants, to the south agricultural land approved by the City for, and partially developed as a sports park, and to the west, Uvas Creek. The project site is adjacent to the City's USA boundary and City limits on the north and east. Figure 3 shows the City's USA boundary and City limits in the vicinity.

Prior Actions

The project site was part of proposed USA Amendment 98-03, which also included the sports park site and six commercial parcels to the south. In conjunction with that amendment, two

environmental impact reports were prepared. The *Gilroy Sports Park and USA Amendment EIR* ("USA Amendment EIR") was prepared in February 1999, based on the land uses in the then current *Gilroy General Plan*. As studied in the USA Amendment EIR, the entire 140-acre area carried Open Space or Park/Public Facility land use designations. Because the City was in the process of updating its general plan at the time, LAFCO required further study to analyze the USA Amendment under the proposed land uses of the then-draft general plan. The *Gilroy USA Amendment 98-03 Subsequent EIR* ("USA Amendment SEIR") was prepared in April 2000 and considered the 140 acres under Park/Recreation Facility, Neighborhood District, and General Services Commercial land use designations. In the USA Amendment SEIR, the project site was studied as Neighborhood District, and a conceptual site plan showing tri-plexes, small and standard lot single-family homes, and a neighborhood park, was presented. The City certified the USA Amendment SEIR on March 18, 2002. LAFCO approved amendment of the City's USA to include the adjacent sports park, but did not approve inclusion of the project site or the commercial parcels. The City has not yet annexed the sports park area.

Description of Project

The proposed project is an amendment to the City of Gilroy USA to include a 27.7-acre area with a *Gilroy General Plan* land use designation of Neighborhood District. The site would be pre-zoned to Neighborhood District. Four parcels are included in the amendment request. Figure 4 shows the project site on an Assessor's parcel map. Table 1 lists the project site parcels.

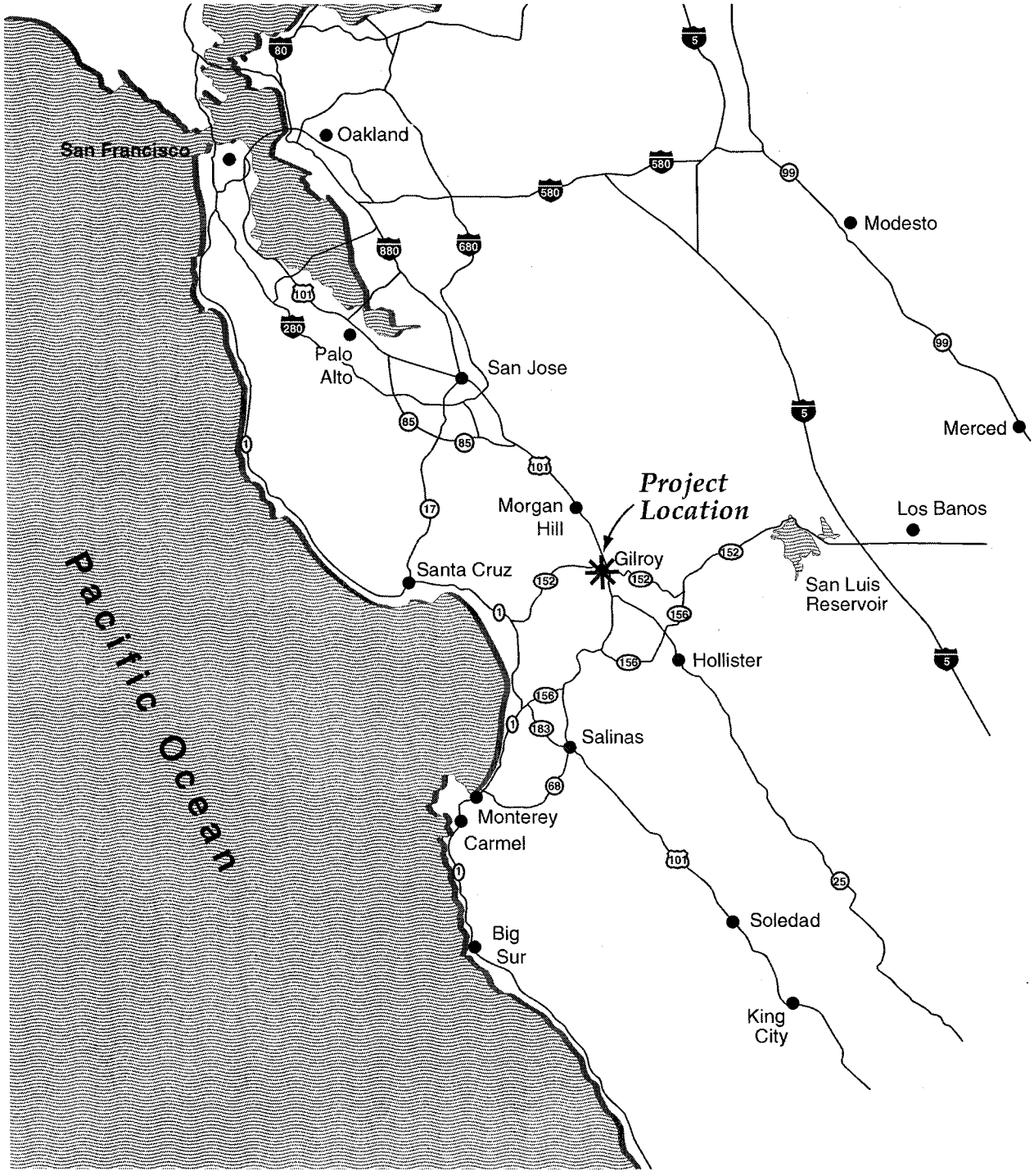
TABLE 1

Project Site Parcels

Assessor's Parcel Number	Acreage
808-21-008	0.10
808-21-009.	0.70
808-21-016	26.05
808-21-018	0.87
Total	**27.7**

Source: City of Gilroy

Following approval of a USA amendment by LAFCO, it is anticipated that the City would formally annex the project site and assign a Neighborhood District zoning designation. At that point, the area could be subdivided and developed in accordance with the City's subdivision and zoning ordinances. The *Gilroy General Plan* Neighborhood District land use designation requires a variety of residential development densities, and encourages small-scale commercial uses. The *Gilroy General Plan* provides a target mix of residential densities in the Neighborhood District. Table 2 summarizes the target mix for residential densities. It is not expected that every project will meet these density mixes, but rather, it is a goal of the general plan that overall development within Neighborhood District designations attain a mix of densities. The City is in the process of adopting a Neighborhood District zoning district, and this district is expected to be in place prior to annexation.



Not to Scale

Source: EMC Planning Group Inc.

Figure 1
Regional Location

Barberi Urban Service Area Amendment Initial Study

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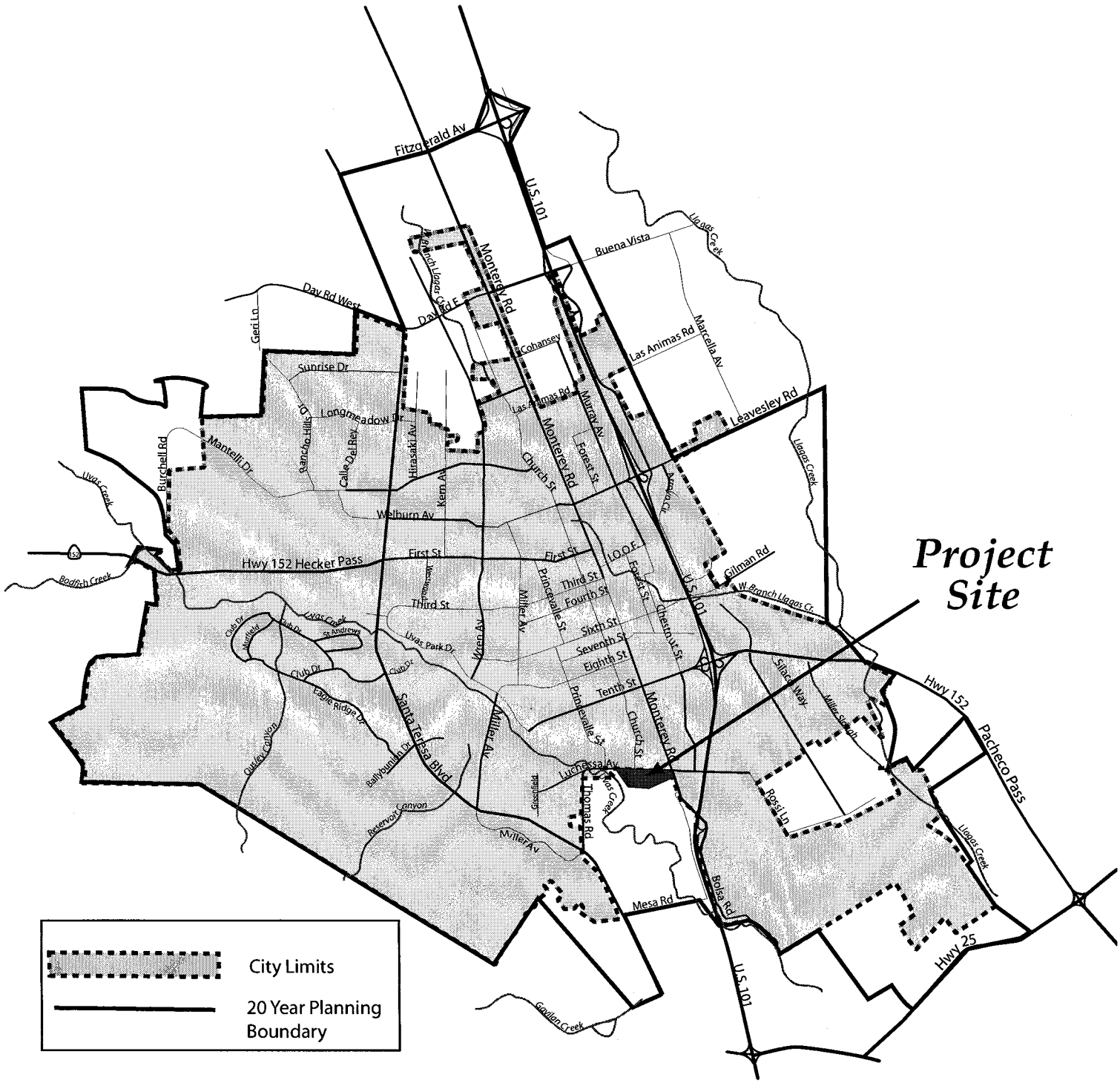

Source: EMC Planning Group Inc.

Figure 2
Project Vicinity

Barberi Urban Service Area Amendment Initial Study

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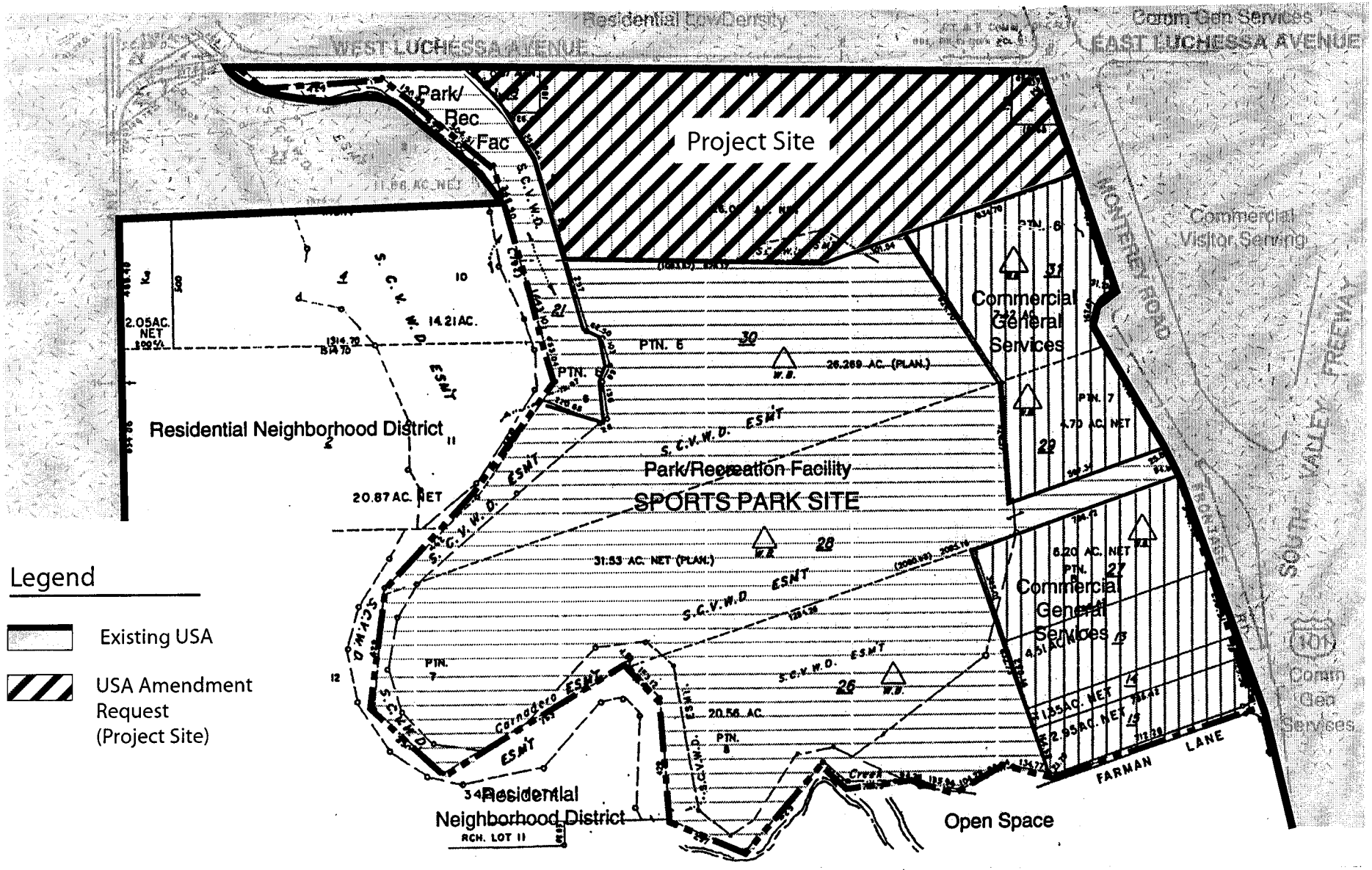

Source: Santa Clara County Office of the Assessor and EMC Planning Group Inc. 2005

Figure 3

Urban Service Area Amendment Request

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Legend

Parcels

Source: EMC 2005, City of Gilroy 2004

Figure 4

Parcels in Amendment Request

Barberi Urban Service Area Amendment Initial Study

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TABLE 2

Neighborhood District Residential Density Targets

Residential Density	Target Percent
High (1 unit/1,452 net sq. ft.)	5% (or more)
Medium (1 unit/2,700 net sq. ft.)	15% (or more)
Duplex (1 unit/4,000 net sq. ft.)	10% (or more)
Low (1 unit/ 6,000 net sq. ft.)	70% (or less)

Source: City of Gilroy and EMC Planning Group Inc.

The applicant has not submitted formal development plans for the project site. However, based on preliminary discussions with the City, the applicant is considering development of 18,000 square feet of commercial uses nearest to Monterey Road, and 220 small lot single-family residential units and 30 apartments or condominiums on the remainder of the project site. This initial study uses these preliminary plans as a probable development scenario.

Other Public Agencies Whose Approval is Required

- Santa Clara County Local Agency Formation Commission (LAFCO) – Approval of USA Amendment.
- Santa Clara Valley Water District – Permit for work within 50 feet of a District facility.
- Regional Water Quality Control Board – NPDES permit.

B. Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- ❑ Aesthetics
- ❑ Agriculture
- ❑ Air quality
- ❑ Biological Resources
- ❑ Cultural Resources
- ❑ Geology/Soils
- ❑ Hazards & Hazardous Materials
- ❑ Hydrology/Water quality
- ❑ Land Use/Planning
- ❑ Mineral Resources
- ❑ Noise
- ❑ Population/Housing
- ❑ Public Services
- ❑ Transportation/Traffic
- ❑ Utilities/Service Systems
- ❑ Mandatory Findings of Significance

C. Determination

On the basis of this initial evaluation:

❑ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

❑ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

❑ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

✓ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

❑ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (1) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (2) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Cydney Casper, Planner II — April 28, 2005

D. Evaluation of Environmental Impacts

Notes

1. A brief explanation is provided for all answers except "No Impact" answers that are adequately supported by the information sources cited in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer is explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis.

2. All answers take account of the whole action involved, including off-site as well as on-site, cumulative as well a project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once it has been determined that a particular physical impact may occur, then the checklist answers indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less-Than-Significant Impact with Mitigation Measures Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-Than-Significant Impact." The mitigation measures are described, along with a brief explanation of how they reduce the effect to a less-than-significant level (mitigation measures from section XVII, "Earlier Analyses," may be cross-referenced).

5. Earlier analyses are used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier document or negative declaration. [Section 15063(c)(3)(D)] In this case, a brief discussion would identify the following:

    a. "Earlier Analysis Used" identifies and states where such document is available for review.

    b. "Impact Adequately Addressed" identifies which effects from the checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and states whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. "Mitigation Measures"—For effects that are "Less-Than-Significant Impact with Mitigation Measures Incorporated," mitigation measures are described which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances, etc.) are incorporated. Each reference to a previously prepared or outside document, where appropriate, includes a reference to the page or pages where the statement is substantiated.

7. "Supporting Information Sources"—A source list is attached, and other sources used or individuals contacted are cited in the discussion.

8. This is the format recommended in the CEQA Guidelines as amended October 1998.

9. The explanation of each issue identifies:

    a. The significance criteria or threshold, if any, used to evaluate each question; and

    b. The mitigation measure identified, if any to reduce the impact to less than significant.

1. Aesthetics

Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Have a substantial adverse effect on a scenic vista or degrade the existing visual character in the Hecker Pass Specific Plan Area (GP Policy 1.07) or the hillside areas (GP Policy 1.16, GP Policy 12.04)? (1, 4)	❑	❑	❑	✓
b. Substantially damage scenic resources viewed from Hecker Pass Highway, Santa Teresa Boulevard, and Pacheco Pass Highway (GP Policy 6.01, GP Policy 12.04)? (1, 4)	❑	❑	❑	✓
c. Substantially damage scenic resources viewed from Uvas Park Drive or Miller Avenue from First Street to Mesa Road (GP Policy 6.02)? (1, 4)	❑	❑	❑	✓
d. Substantially damage scenic resources (farmland and surrounding hills) viewed from Highway 101 (GP Policy 6.03, Action 1-H)? (1, 5)	❑	❑	✓	❑
e. Result in unattractive entrances at the principal gateways to the City (north and south Monterey Street, Highway 152/Hecker Pass Highway, Highway 152/Pacheco Pass, north and south Santa Teresa Boulevard, and at the Highway 101 interchanges at Masten, Buena Vista, Leavesley, and Tenth Street) (GP Policy 1.10 and Action 1-H)? (1, 5, 15)	✓	❑	❑	❑
f. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? (5, 14, 15)	❑	✓	❑	❑
g. Include or require a wall or fence higher than seven feet above the existing grade at the property line? (5, 15)	✓	❑	❑	❑

Comments:

a-c. The project site is not within, nor visible from, any of these areas.

d. The project site and adjacent area to the south are predominantly farmland. However, a sports park is approved and under development on the land immediately south of the project site.

Land to the north of the project site is developed with houses, and land to the east, between U.S. Highway 101 and the project site is developed with hotels and restaurants. The proposed project would alter the current agricultural use of the property, but would not significantly affect the overall character of the area.

e, g. The project site is located along southern Monterey Road, one of the City gateways identified in the *Gilroy General Plan.* The USA Amendment SEIR analyzed residential development on the project site. Commercial uses may be developed along the Monterey Road portion of the project site. *Gilroy General Plan* policies for the Neighborhood District land use designation require careful siting and design. In addition, the commercial development would require approval under the City's Architectural and Site Review process prior to development. Therefore, specific development proposals should meet the City's aesthetic standards prior to approval.

Because noise levels could be in excess of City standards, an eight-foot sound wall could be required to reduce noise levels at residences along Luchessa Avenue to acceptable levels. However, the City's aesthetic policies regarding sound walls, and the presence of a flood flow easement over a portion of the project site were cited in the USA Amendment SEIR as potentially limiting the location and height of the sound walls. An updated noise study will be prepared for the proposed project and included in the EIR. Dependant on the results of the new noise study, and mitigation measures proposed by the new noise study, the EIR may examine the effects of sound walls on aesthetics.

f. The proposed project would not result in unusual amounts of lighting. *Gilroy General Plan* policies for the Neighborhood District land use designation require careful siting and design. Approval through the City's Architectural and Site Review process should address any potential conflicts between commercial lighting and adjacent residential uses. The project site is adjacent to the Gilroy Sports Park, which is under development and will have lighted fields. The USA Amendment SEIR analyzed the effects of sports park lighting on the project site, and mitigation measures were proposed for implementation by the residential developer, which would reduce the lighting impacts on the proposed project to a less than significant level.

If the new noise study indicates the need for sound walls in excess of seven feet in height, the EIR will address the potential aesthetic effects along affected public streets and within the City's Monterey Road gateway.

2. Agriculture Resources

In determining whether impacts on agricultural resources are significant environmental effects and in assessing impacts on agriculture and farmland, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model. Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Convert prime farmland or farmland of statewide importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to an urban use (projects requiring a legislative act, such as zoning changes, annexation to the City, urban service area amendments, etc)? (1, 2, 6, 15)	✓	❑	❑	❑
b. Conflict with a Williamson Act contract? (4)	❑	❑	❑	✓
c. Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to nonagricultural use? (5, 14, 15)	❑	❑	✓	❑

Comments:

a. The project site is designated as Prime Farmland on the Santa Clara County Important Farmlands Map. The USA Amendment SEIR determined that development of the project site would have a significant and unavoidable impact on Prime Farmland, and the City adopted a Statement of Overriding Considerations in approving the prior USA Amendment and sports park. The City has adopted new agricultural mitigation policies since that time. The EIR will examine the loss of Prime Farmland.

b. The project site is not under a Williamson Act contract.

c. The project site is essentially surrounded by the City's existing USA, and existing or approved development. The proposed project would not significantly affect any surrounding agricultural areas.

The EIR will examine the loss of Prime Farmland in the context of the City's agricultural policies.

3. Air Quality

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Conflict with the Bay Area Air Quality Management District Clean Air Plan (BAAQMD CAP)? (1, 2, 7)	✓	❑	❑	❑
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation? BAAQMD indicates that any project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact. (1, 2, 7)	✓	❑	❑	❑
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)? (1, 2, 7)	✓	❑	❑	❑
d. Expose sensitive receptors (residential areas, schools, hospitals, nursing homes) to substantial pollutant concentrations (CO and PM_{10}), as determined in b. above? (1, 2, 7)	✓	❑	❑	❑
e. Create objectionable odors affecting a substantial number of people? ()	❑	❑	❑	✓

Comments:

a-d. The proposed project would result in additional construction and operational air emissions in an air basin that is in non-attainment of State and federal air quality standards. The EIR will examine the proposed project's effects on air quality.

e. The proposed project would not create objectionable odors.

The EIR will examine the proposed project's effects on air quality in the air basin under the guidelines of the Bay Area Air Quality Management District.

4. Biological Resources

Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? (5, 8, 15)	✓	❑	❑	❑
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? (5, 15)	❑	❑	✓	❑
c. Have a substantial adverse effect on federally protected wetlands, as defined by section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.), through direct removal, filling, hydrological interruption, or other means? (15)	❑	❑	❑	✓
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (15)	❑	❑	✓	❑
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (1, 3, 15)	❑	❑	❑	✓
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (1, 15)	❑	❑	❑	✓

Comments:

a. The California tiger salamander was listed by the U.S. Fish and Wildlife Service after the previous USA Amendment SEIR was certified. The project site is less than three-quarters of a mile from known California tiger salamander habitat. The EIR will evaluate whether the

proposed project could have significant effects on California tiger salamander. The USA Amendment SEIR identified potential effects on raptor and burrowing owl habitat immediately west of the project site. The USA Amendment EIR identified potential effects on wildlife in the riparian area immediately west of the project site. The EIR will re-evaluate these effects, and present or update the mitigation measures presented in the USA Amendment SEIR.

b. Riparian habitat is found along Uvas Creek, within 100 feet west of the project site. Although the proposed project could potentially affect species within this riparian area (see item a.), the project site itself does not contain riparian vegetation, and is separated from Uvas Creek by a levee.

c. There are no wetlands on the project site.

d. The proposed project would not affect wildlife movement or nursery sites. However, refer to item a regarding potential disturbance of wildlife from lighting.

e-f. The project site is not within a habitat conservation plan nor are there known valuable biological resources protected by local policies. However, the City of Gilroy has agreed to enter into the Santa Clara Valley Water District Multi Species Habitat Conservation Plan (MSHCP) to address the issue of habitat loss for California tiger salamander. The MSHCP is in the preliminary stages and is not likely to be completed until at least 2010. As an interim measure while the MSHCP is in process, the California Department of Fish and Game is identifying suitable habitat for preservation as part of an Area-Wide Strategy.

The EIR will examine potential effects on biological resources in and adjacent to the project site. The EIR will address potential special status species in and near the project site, including the suitability of the project site as habitat for California tiger salamander.

5. Cultural Resources

Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5? (15)	❑	❑	❑	✓
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5? (15)	❑	✓	❑	❑
c. Disturb any human remains, including those interred outside of formal cemeteries? (15)	❑	✓	❑	❑

Comments:

a. A historic resources report prepared for the USA Amendment SEIR identified several houses south of the project site as potentially historic. An archival search indicated that an historic cabin (circa 1850) was located on the western end of the project site, but the December 1999 field visit by the historic consultant revealed that the site of the cabin is now vacant.

b-c. The archeological resources investigation conducted for the USA Amendment SEIR did not reveal any surface evidence of cultural resources. Two recorded archaeological sites were noted within one half mile. Standard cultural resources discovery measures presented in the USA Amendment SEIR would apply to the proposed project and mitigate potential impacts to a less than significant level.

The EIR will briefly discuss the earlier environmental review of cultural resources at the project site, and present applicable mitigation measures from the earlier environmental documents.

6. Geology and Soils

Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
(1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. (1, 2, 15)	❑	❑	❑	✓
(2) Strong seismic ground shaking? (1, 2, 15)	❑	❑	✓	❑
(3) Seismic-related ground failure, including liquefaction? (1, 2, 9, 15)	❑	❑	✓	❑
(4) Landslides? (5)	❑	❑	❑	✓
b. Result in substantial soil erosion or the loss of topsoil? (9, 15)	❑	❑	✓	❑
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? (9, 15)	❑	❑	✓	❑
d. Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2001), creating substantial risks to life or property? (9, 15)	❑	❑	✓	❑

Comments:

a. The project site is not identified as within an Alquist-Priolo Earthquake Fault Zone. The project site is within *Uniform Building Code* Seismic Zone 4, which is subject to potentially severe shaking during earthquakes. The project site is about four miles southwest of the Calaveras Fault, thee miles northeast of the Sargent Fault, and seven miles northeast of the San Andreas Fault. The project site soils are moderately susceptible to liquefaction. Building designs and engineering required under the *Uniform Building Code* and local amendments would provide reasonable protection for buildings and their inhabitants during earthquakes. The site is level and not subject to landslides.

b. The project soils and topography do not result in a high risk of erosion.

c. The project site is level and not suspected of being geologically unstable. The project site soils are moderately susceptible to liquefaction.

d. The project site soils are moderately expansive. Standard building designs would address any issues related to expansive soils.

The EIR will not address Geology and Soils.

7. Hazards and Hazardous Materials

Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (5)	❑	❑	❑	✓
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (5)	❑	❑	❑	✓
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (5)	❑	❑	❑	✓
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, create a significant hazard to the public or the environment? (5)	❑	❑	❑	✓
e. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (1)	❑	❑	❑	✓
f. Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands area adjacent to urbanized areas or where residences are intermixed with wildlands? (1, 5)	❑	❑	❑	✓

Comments:

a-f. The proposed project allows for residential and neighborhood commercial uses, and would not involve the use or transport of significant quantities of hazardous materials. The nearest school is Gilroy High School, about four-tenths of a mile to the northwest. The project site is not a hazardous materials site. The proposed project is consistent with the *Gilroy General Plan* and would not affect emergency response plans. The project site is not in an area subject to wildlands fires.

The EIR will not address Hazards and Hazardous Materials.

8. Hydrology and Water Quality

Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Violate any water-quality standards or waste-discharge requirements? (1, 10, 11)	❑	❑	❑	✓
b. Substantially deplete ground-water 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)? (12, 15)	❑	❑	✓	❑
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river in a manner that would result in *substantial erosion or siltation on- or off-site?* (15)	❑	❑	✓	❑
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface run-off in a manner that would result in *flooding on- or off-site?* (15)	❑	✓	❑	❑
e. Create or contribute run-off water, which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted run-off? (15)	❑	❑	✓	❑
f. Otherwise substantially degrade water quality? (15)	❑	✓	❑	❑
g. Place housing within a 100-year flood hazard area as mapped on Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (15)	❑	✓	❑	❑
h. Place within a 100-year flood hazard area structures, which would impede or redirect flood flows? (15)	❑	✓	❑	❑

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
i. Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam? (15)	❑	❑	✓	❑

Comments:

a. The proposed project is a residential and neighborhood commercial project that would not result in significant waste discharges.

b. The proposed project is consistent with the *Gilroy General Plan* and the assumptions of the *Gilroy Water Master Plan*. Water supply and demand will be addressed in the EIR's utilities section.

c-e, g-h. About four acres at the eastern end of the project site are within the FEMA 100-year flood zone, and subject to less than one foot of inundation during a 100-foot storm. This area may be developed with housing or commercial uses if the pad elevations are raised to at least one foot above flood elevation. Less than one acre in the south-central portion of the project site is within a recorded flood flowage easement, held by the Santa Clara Valley Water District. The flood flowage easement restricts uses in that area. Although residential uses would not be allowed, a park or street would be acceptable. The USA Amendment SEIR includes a mitigation measure requiring preparation of a hydrologic study of areas within the 100-year flood zone or the flood flowage easement, prior to development. The hydrological study must show that a project will be consistent with the City's Flood Plain Control Ordinance, and not impede the flow of floodwaters, or increase off-site flooding levels. This mitigation measure would reduce potential flood impacts to a less than significant level.

f. Sedimentation and urban pollutants could result in pollution of Uvas Creek or other downstream rivers. The USA Amendment SEIR included several mitigation measures to assure water quality, including requirements for a storm water pollution prevention plan, and a permit from the Santa Clara County Water District for work within 50 feet of Uvas Creek or the flood flowage easement. In addition, projects are required to provide sedimentation and grease capture, and adherence to best management practices. These measures would reduce water quality impacts to a less than significant level.

i. The project site is adjacent to Uvas Creek and downstream of the Uvas Reservoir. Most of the project site is protected by a levee constructed by the Army Corps of Engineers in 1991. About four acres at the eastern end of the project site are within the FEMA 100-year flood zone, and subject to less than one foot of inundation during a 100-foot storm. This area could be developed only if pad elevations are raised to at least one-foot above the 100-year flood level. Less than one acre in the south-central portion of the project site is within a recorded flood flowage easement, held by the Santa Clara Valley Water District. These areas would be subject to flooding following dam failure. The chance of a dam failure is considered very remote due to the level of engineering that goes into the design of the dams, and the stringent maintenance and inspection requirements.

The EIR will briefly discuss the earlier environmental review of hydrology and water quality at the project site, and present applicable mitigation measures from the earlier environmental documents.

9. Land Use and Planning

Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Physically divide an established community? (1)	❑	❑	❑	✓
b. Conflict with any applicable land-use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the general plan, specific plan, zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (1)	❑	❑	❑	✓

Comments:

a-b. The proposed project would not divide an established community and is consistent with the *Gilroy General Plan*.

The EIR will not address Land Use and Planning.

10. Mineral Resources

Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Result in loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (1, 2, 14, 15)	❑	❑	❑	✓

Comments:

a. There are no known mineral resources on the project site.

The EIR will not address Mineral Resources.

11. Noise

Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Result in exposure of persons to or generation of noise levels in excess of standards established in the general plan? (15)	✓	❑	❑	❑
b. Result in exposure of persons to or generation of excessive ground-borne vibration or ground borne noise levels? (15)	❑	❑	❑	✓
c. Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (15)	✓	❑	❑	❑

Comments:

a, c. The USA Amendment SEIR determined that there could be significant noise impacts at the project site, from traffic along Monterey Road and Luchessa Avenue, and from activities at the sports park. Noise from construction activities could affect nearby residences. The City has adopted new noise standards since the USA Amendment SEIR was certified. A new noise study will be prepared and the EIR will re-evaluate noise impacts.

b. The proposed use would not result in or be exposed to vibration.

A new noise study will be prepared and the EIR will re-evaluate noise impacts under the new *Gilroy General Plan* policies.

12. Population and Housing

Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. 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)? (5)	❑	❑	❑	✓
b. Displace substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere? (5)	❑	❑	❑	✓

Comments:

a. The proposed project would result in infill development between existing residential uses and a sports park that is under development. The proposed project would not extend infrastructure or induce growth.

b. No housing exists on the project site.

The EIR will not address Population and Housing.

13. Public Services

Would the project result in substantial adverse physical impacts associated with the provision of or 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 following public services:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Fire protection? (1, 2, 16)	✓	❑	❑	❑
b. Police protection? (1, 2)	✓	❑	❑	❑
c. Schools? (1, 2)	✓	❑	❑	❑
d. Parks? (1, 2)	✓	❑	❑	❑
e. Other Public Facilities? (1, 2)	✓	❑	❑	❑

Comments:

a-e. Since certification of the USA Amendment SEIR, the City has adopted a new general plan and fire services master plan. The USA Amendment SEIR did not anticipate commercial uses on a portion of the project site. The provision of municipal services is of key importance in the evaluation of jurisdictional boundary changes.

The EIR will evaluate potential effects on fire and other public services.

14. Transportation/Traffic

Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system? (1, 2, 15)	✓	❑	❑	❑
b. Exceed, either individually or cumulatively, a level of service standard established by the Santa Clara Valley Transportation Authority for designated roads or highways? (1, 2, 15)	✓	❑	❑	❑
c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (5, 15)	❑	❑	✓	❑
d. Result in inadequate emergency access? (1, 2, 5, 15)	❑	❑	✓	❑
e. Result in inadequate parking capacity? (3)	❑	❑	❑	✓
f. Conflict with any City of Gilroy General Plan Transportation and Circulation Element policies? (1, 15)	❑	❑	❑	✓

Comments:

a-b. A traffic report prepared for the USA Amendment EIR determined that traffic impacts could result from sports park, commercial, and residential traffic in the larger amendment area. A new traffic study will be prepared to update existing conditions and surrounding development assumptions.

The new traffic report will investigate traffic conditions at seven intersections: West Luchessa Avenue/Princevalle Street; West Luchessa Avenue/Church Street; Monterey Road/Farman Frontage Road; Monterey Road/West Luchessa Avenue; Monterey Road/U.S. Highway 101 southbound on-ramp; and Monterey Road/U.S. Highway 101 northbound off-ramp. The new traffic report will also study the following roadway and freeway segments: West Luchessa Avenue between Monterey Street and Princevalle Street; West Luchessa Avenue between Princevalle Street and Santa Teresa Boulevard; Monterey Street between Tenth Street and West Luchessa Avenue; Monterey Street between West Luchessa Avenue and the U.S. Highway 101 southbound on-ramp; U.S. Highway 101 between Tenth Street and Monterey Street, and U.S. Highway 101 between Monterey Street and Castro Valley Road.

c-d. The police and fire departments would review subdivision maps and development plans prior to approval of any tentative maps or development permits. Design hazards and emergency access

would be reviewed for adequacy during review by those agencies, and any problems resolved at that time.

e. The proposed project would meet the parking standards of the City's zoning ordinance.

f. The proposed project would not affect the City's transportation plan, or the location or function of any collector or arterial streets.

The EIR will evaluate traffic conditions studied in the new traffic report.

15. Utilities and Service Systems

Would the project:

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? (1, 11)	✓	❑	❑	❑
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (1, 11, 12)	✓	❑	❑	❑
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (1, 10)	✓	❑	❑	❑
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? (1, 2)	✓	❑	❑	❑
e. 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? (1, 11)	✓	❑	❑	❑
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid-waste disposal needs? (1, 2)	✓	❑	❑	❑

Comments:

a-f. Although the proposed project is consistent with the *Gilroy General Plan*, upon which the City's utility master plans are based, these have all been adopted since the USA Amendment SEIR was certified. The USA Amendment SEIR did not anticipate commercial development on a portion of the project site. The provision of utilities is of key importance in the analysis of jurisdictional boundary changes.

The EIR will re-evaluate the provision of utilities to the proposed project.

16. Mandatory Findings of Significance

	Potentially Significant Impact	*Less-than-Significant Impact with Mitigation Measures Incorporated*	*Less-Than-Significant Impact*	*No Impact*
a. Does the project have the potential to degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of an endangered, rare, or threatened species; or eliminate important examples of the major periods of California history or prehistory? (8, 15)	✓	❑	❑	❑
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) (1, 2, 6, 7, 8, 15)	✓	❑	❑	❑
c. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly? (1, 2, 7, 15)	✓	❑	❑	❑

Comments:

a. The proposed project would be located within three-quarters of a mile of a known California tiger salamander population. The California tiger salamander was listed by the U.S. Fish and Wildlife Service since the USA Amendment SEIR was certified. The EIR will address potential impacts to California tiger salamander. Mitigation measures in the USA Amendment SEIR would reduce potential impacts to burrowing owls and raptors to a less than significant level.

   No significant historic sites exist on the project site. Buried archaeological resources could exist on the project site, but standard mitigation measures would reduce potential impacts to a less than significant level.

b. The proposed project could contribute to significant cumulative effects on air quality, agricultural resources, biological resources, noise, and transportation. These areas will be addressed in the EIR.

c. The proposed project could result in significant air pollutant and noise effects on residents of the proposed project. The EIR will address air quality and noise impacts.

E. Sources

1. *City of Gilroy General Plan* (2002)

2. *Gilroy General Plan EIR* (2002)

3. *Gilroy Zoning Ordinance* (2004)

4. Assessor's Parcel Map

5. Site Visits by EMC Planning Group Inc. (1999-2005)

6. *Santa Clara County Important Farmlands Map* (Department of Conservation, 2000)

7. *BAAQMD CEQA Guidelines, Assessing Air Quality Impacts of Projects and Plans* (Bay Area Air Quality Management District (December 1999)

8. *Inventory of Rare and Endangered Vascular Plants of California.* (California Native Plant Society, 2001)

9. *Soil Survey of Eastern Santa Clara County, California* (USDA Soil Conservation Service September 1974)

10. *City of Gilroy Storm Drain Master Plan* (Carolla, 2004)

11. *City of Gilroy Sewer Master Plan.* (Carolla, 2004)

12. *City of Gilroy Water Master Plan.* (Carolla, 2004)

13. *Draft Storm Water Management Plan* (Carolla, April 2003)

14. *Gilroy Sports Park and USA Amendment EIR* (EMC Planning Group Inc., February 1999)

15. *Gilroy Urban Service Area Amendment 98-03 Subsequent EIR* (EMC Planning Group Inc., April 2000)

16. *Gilroy Fire Services Master Plan* (Citygate Associates, September 2004)

All documents indicated with bold numbers are available for review at the **City of Gilroy, 7351 Rosanna Street, Gilroy, (408) 846-0440** during normal business hours.

All documents listed above are available for review at EMC Planning Group, Inc., 301 Lighthouse Avenue, Suite C, Monterey, California 93940, (831) 649-1799 during normal business hours.

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LAFCO
Local Agency Formation Commission of Santa Clara County

RECEIVED
MAY 12 2005
Gilroy Planning Div.

May 10, 2005

Cydney Casper, Planner II
City of Gilroy Planning Division
7351 Rosanna Street
Gilroy, CA 95020-6197

Re: Comments on the Initial Study and the NOP for Draft Environmental Impact Report (Gilroy USA Amendment 04-02: Barberi USA Amendment)

Dear Ms. Casper:

Thank you for providing the Local Agency Formation Commission of Santa Clara County (LAFCO) the opportunity to comment on the Initial Study and the Notice of Preparation (NOP) for the DEIR (Gilroy USA Amendment 04-02: Barberi USA Amendment) that was received by LAFCO on May 6, 2005.

According to the Initial Study and NOP, the EIR will not address Land Use and Planning. We believe that the **Land Use and Planning Section** should be included in the EIR and that the section should include information that describes the existing General Plan Land Use classifications and policies of the City of Gilroy that are applicable to the project site and analyze project's consistency with those policies. Furthermore, the EIR should analyze the project's consistency with LAFCO Policies, particularly relating to Urban Service Areas (see Attachment A).

In addition, on page 29 of the Initial Study, the City states "the proposed project would result in infill development between existing residential uses and a sports park that is under development." The City should provide further information to support this statement because the proposed project is not completely surrounded by urban development (Assessor Parcel No. 808-21-031 is unincorporated, not developed with an urban use, and outside of the City's Urban Service Area boundary), the sports park site is unincorporated and located outside of the City's Urban Service Area boundary, and the status of the sports park development is not fully explained in the Initial Study and should be fully explained in the EIR.

Lastly, the Initial Study states that the proposed project would not extend infrastructure or induce growth and that the applicant is considering developing 18,000 square feet of commercial uses, 220 small lot single-family residential units, and 30 apartments or

condominiums on the project site. The site proposed for the project currently does not receive City sewer service or City water service and therefore, the City would need to extend infrastructure (water lines, sewer lines, roads, etc.) to the project site. Therefore, we do not think the "No Impact" finding stated under **Population and Housing** is supported given the proposed project. Therefore, we request that the City address population and housing in the EIR.

LAFCO, as a Responsible Agency, looks forward to receiving a copy of the Draft EIR for our review and comment. Please call me at (408) 299-5148 if you have any questions regarding these comments or LAFCO Policies.

Sincerely,

Dunia Noel

Dunia Noel, LAFCO Analyst

Attachment

Attachment A – LAFCO's Urban Service Area Policies

URBAN SERVICE AREA POLICIES

A. General Guidelines

1. Review and amendment of Urban Service Area (USA) boundaries is the Commission's primary vehicle for encouraging orderly city growth.
2. LAFCO will review/amend a city's Urban Service Area once a year, if such review is desired by the city and initiated by city resolution and application. Until a city's application has been heard and acted upon by the Commission, no further Urban Service Area amendments will be accepted for filing from that city. LAFCO may make an exception to the once a year limitation upon Urban Service Area amendment requests where amendment is needed to carry out some special institutional development or activity that is in the public interest. Such exceptions shall not normally be extended in connection with proposed residential, commercial, or industrial development.
3. Within the Urban Service Areas, LAFCO does not review city annexations and reorganizations if the proposals are initiated by city resolution and meet certain conditions. State law gives cities in Santa Clara County the authority to approve such reorganizations.

B. Urban Service Area Amendment Policies

1. LAFCO will require application of an appropriate general plan designation to territory proposed for inclusion in an Urban Service Area.
2. LAFCO encourages contractual agreements and/or plans between the cities and the County which define:
   a. Growth at the urban fringe; and
   b. Potential new growth areas.
3. LAFCO will consider factors included in Government Code section 56668 as well as factors such as the following to determine the local and regional impacts of a proposed Urban Service Area amendment:
   a. The ratio of lands planned for residential use to lands planned for employment-producing use
   b. The existence of adequate regional and local transportation capabilities to support the planned city growth;

c. Ability of the city to provide urban services to the growth areas without detracting from current service levels;

d. The ability of school districts to provide school facilities;

e. Whether the conversion of agricultural and other open space lands is premature, or if there are other areas into which to channel growth;

f. The role of special districts in providing services;

g. Environmental considerations which may apply;

h. The impacts of proposed city expansion upon the County as a provider of services;

i. Fiscal impacts on other agencies;

j. Regional housing needs;

k. Availability of adequate water supply; and

l. Consistency with city or county general and specific plans.

4. LAFCO will consider the applicable service reviews and discourage urban service area amendments that undermine adopted service review determinations or recommendations.

5. When a city with a substantial supply of vacant land within its Urban Service Area applies for an Urban Service Area expansion, LAFCO will require an explanation of why the expansion is necessary, why infill development is not undertaken first, and how an orderly, efficient growth pattern, consistent with LAFCO mandates, will be maintained.

6. The Commission will discourage Urban Service Area expansions which include agricultural or other open space land unless the city has accomplished one of the following:

   a. Demonstrated to LAFCO that effective measures have been adopted for protecting the open space or agricultural status of the land. Such measures may include, but not limited to, the establishment of agricultural preserves pursuant to the California Land Conservation Act, the adoption of city/County use agreements or applicable specific plans, the implementation of clustering or transfer-of-development-rights policies; evidence of public acquisition; or

   b. Demonstrated to LAFCO that conversion of such lands to other than open space uses is necessary to promote the planned, orderly, efficient development of the city.

7. The Commission will consider whether an Urban Service Area amendment leading to the conversion of agricultural or other open space land, will adversely affect the agricultural or open space resources of the County. Factors to be studied include, but are not limited to:

   a. The agricultural significance of the amendment area relative to other agricultural lands in the region (soil, climate, water-related problems, parcel size, current land use, crop value, Williamson Act contracts, etc.)

   b. The economic viability of use of the land for agriculture;

   c. Whether public facilities, such as roads, would be extended through or adjacent to other agricultural lands in order to provide services to anticipated development in the amendment area or whether the public facilities would be sized or situated to impact other agricultural lands in the area

   d. Whether the amendment area is adjacent to or surrounded by existing urban or residential development.

8. If an Urban Service Area proposal includes the conversion of open space lands or agricultural lands, LAFCO strongly encourages the city to develop effective mitigation measures to address the loss of the agricultural and open space lands. LAFCO will require an explanation of why the inclusion of agricultural and open space lands is necessary and how the loss of such lands will be mitigated.

   Mitigation measures include, but are not limited to: the acquisition and dedication of farmland, development rights, open space and conservation easements to permanently protect adjacent and other agricultural lands within the county, participation in other development programs such as transfer or purchase of development rights, payments to recognized government and non-profit organizations for such purposes, and establishment of buffers to shield agricultural operations from the effects of development.

9. Where appropriate, LAFCO will consider adopted policies advocating maintenance of greenbelts or other open space around cities in reviewing Urban Service Area amendments.

10. LAFCO will require evidence that an adequate water supply is available to the amendment areas and that water proposed to be provided to new areas does not include supplies needed for unserved properties already within the city, the city's Urban Service Area or other properties already charged for city water services. In

determining water availability, LAFCO will evaluate, review and consider:

a. The city's plan for water service to the area and statement of existing water supply in terms of number of service units available; service units currently allocated; number of service units within city (and current USA) boundaries that are anticipating future service and service units needed for amendment area.

b. Whether the city is able to provide adequate water supply to the amendment area in the next 5 years, including drought years, while reserving capacity for areas within the city and Urban Service Area that have not yet developed.

c. Whether the city is capable of providing adequate services when needed to areas already in the city, in the city's Urban Service Area or to other properties entitled to service.

d. If capacity is not reserved for unserved property within the city and its Urban Service Area boundary, the current estimate of potential unserved properties and related water supply needs

e. Whether additional infrastructure and or new water supplies are necessary to accommodate future development or increases in service demand. If so, whether plans, permits and financing plans are in place to ensure that infrastructure and supply are available when necessary including compliance with required administrative and legislated processes, such as CEQA review, CEQA mitigation monitoring plans, or State Water Resources Board allocation permits. If permits are not current or in process, or allocations approved, whether approval is expected.

f. Whether facilities or services comply with environmental and safety standards so as to permit acquisition, treatment, and distribution of necessary water.

11. LAFCO will discourage proposals that undermine regional housing needs plans, reduce affordable housing stock, or propose additional urbanization without attention to affordable housing needs. LAFCO will consider:

a. Whether the proposal creates conditions that promote local and regional policies and programs intended to remove or minimize impediments to fair housing including city/ county general plan housing elements, Analysis of Impediments to Fair Housing or Consolidated Plans for Housing and Community Development and ABAG's regional housing needs assessment and related policies.

b. Whether the proposal introduces urban uses into rural areas thus increasing the value of currently affordable rural area housing and reducing regional affordable housing supply.

c. Whether the proposal directs growth away from agricultural / open space lands towards infill areas and encourages development of vacant land adjacent to existing urban areas thus decreasing infrastructure costs and potentially housing construction costs.

d. Whether funding of infrastructure to support development in the amendment area imposes an unfair burden on residents or customers within the existing boundaries thus impacting housing construction costs in the area.

DEPARTMENT OF TRANSPORTATION
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(510) 286-5505
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May 31, 2005

SCL-101-R5.26
SCL101599
SCH1998102079

Ms. Cydney Casper
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

RECEIVED
JUN 02 2005
Gilroy Planning Div.

Dear Ms. Casper:

Barberi Urban Service Area (USA) - Amendment, Notice of Preparation (NOP)

Thank you for including the California Department of Transportation (Department) in the environmental review process for the proposed project. We have reviewed the NOP for the proposed amendment and have the following comments to offer.

Our primary concern with the project is the potentially significant impact it may have to traffic volume and congestion. In order to address our concerns regarding the proposed development, we recommend a revised traffic impact analysis be prepared. The traffic impact analysis should include, but not be limited to the following:

1. Information on the project's traffic impacts in terms of trip generation, distribution, and assignment. The assumptions and methodologies used in compiling this information should be addressed.

2. Current Average Daily Traffic (ADT), AM, and PM peak hour volumes on all significantly affected streets, highway segments, intersections and ramps.

3. Schematic illustration of the traffic conditions for: 1) existing, 2) existing plus master plan, and 3) cumulative for the intersections in the master plan area.

4. Calculation of cumulative traffic volumes should consider all traffic-generating developments, both existing and future, that would affect the State Highway facilities being evaluated. The analysis should include the future 20 year traffic impacts with recommended mitigation as appropriate.

5. Mitigation measures should consider highway and non-highway improvements and services. Special attention should be given to the development of alternate solutions to circulation problems that do not rely on increased highway construction.

6. All mitigation measures proposed should be fully discussed, including financing, scheduling, implementation responsibilities, and lead agency monitoring.

We recommend you utilize Caltrans' *"Guide for the Preparation of Traffic Impact Studies"* which can be accessed from the following webpage:
http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf

Should you require further information or have any questions regarding this letter, please call José L. Olveda of my staff at (510) 286-5535.

Sincerely,

TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Scott Morgan, State Clearinghouse

County of Santa Clara

Roads and Airports Department
Land Development and Permits
101 Skyport Drive
San Jose, California 95110-1302
(408) 573-2460 FAX (408) 441-0275

June 3, 2005

RECEIVED
JUN 06 2005
Gilroy Planning Div

Cydney Casper
Community Development Department
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

Subject: Notice of Preparation of a Draft Environmental Impact Report (DEIR)
Barberi Urban Service Area (USA) Amendment
Gilroy USA 04-02
APNs: 808-21-008, 009, 016, and 018

Dear Ms. Casper,

We have reviewed the Initial Study and Notice of Preparation of a DEIR for the above subject attached to your letter dated May 3, 2005 and we have the following comments:

Please include in the Traffic Impact Report any potential traffic impact on nearby County facilities resulting from traffic generated by this project. The report should discuss and assess the vehicular impacts and subsequent mitigation measures.

Please send us a copy of the environmental document and traffic analysis for our review when available. Thank you for the opportunity to review this project. If you have any questions, please call me at (408) 573-2450.

Sincerely,

Carmelo Peralta
Project Engineer

Cc: Kelly Felice, City of Gilroy
MA/SK, RN, WRL, File

Board of Supervisors: Donald F. Gage, Blanca Alvarado, Pete McHugh, James T. Beall Jr., Liz Kniss
County Executive: Peter Kutras, Jr.

SANTA CLARA
Valley Transportation Authority

June 6, 2005

City of Gilroy
Community Development Department
7351 Rosanna Street
Gilroy, CA 95020

Attention: Cydney Casper

Subject: City File No. USA 04-02 / Barberi Urban Service

Dear Ms. Casper:

Santa Clara Valley Transportation Authority (VTA) staff have reviewed the NOP for a Draft EIR for an urban service amendment to include 27 acres as Neighborhood District located south of Luchessa Avenue, west of Monterey Road. We have the following comments.

On-Site Planning and Design

Building Density, Orientation, Parking, and Pedestrian Connectivity

VTA supports the proposed land use change and looks forward to reviewing future development plans for this site once they become available.

In general, VTA recommends developing this site at the maximum possible density. VTA also recommends that future residential units and any commercial facilities at this site be oriented to the street as much as possible, with minimum setbacks and parking to the rear of buildings. VTA also encourages the incorporation of thoughtful pedestrian connectivity into future site designs to minimize walking distances to any neighborhood-serving retail or personal services on the site, as well as to provide convenient connections and reduce the distance to area transit stops.

VTA also recommends locating public uses (such as retail) on the ground floor of any mixed-use or commercial buildings when possible to make pedestrian access convenient. Developments that provide a mix of compatible land uses within walking distance of each other foster lively pedestrian environments and reduce the need for automobile travel, thereby enhancing the local community.

The VTA *Community Design & Transportation (CDT) Guidelines* and the VTA *Pedestrian Technical Guidelines* should be used when designing future developments at this site. These documents provide guidance on site planning, building design, street design, preferred pedestrian environment, intersection design and parking requirements. Both documents are available upon request to agency staff. For more information, please call Chris Augenstein, Development & Congestion Management Division, at 408-321-5725.

The VTA *Bicycle Technical Guidelines* should also be used when designing future developments at this site. This document provides guidance on estimating supply, siting and design for bicycle storage facilities. This document may be downloaded from www.vta.org/news/vtacmp/Bikes. For more information on bicycle systems and parking, please contact Michelle DeRobertis, Development & Congestion Management Division, at 408-321-5725.

Transportation System Planning and Design

TIA Report

VTA's Congestion Management Program (CMP) requires a Transportation Impact Analysis (TIA) for any project that is expected to generate 100 or more new peak-hour trips. Based on the information provided on the size of the project, a TIA may be required.

VTA's *Transportation Impact Analysis Guidelines* should be used when preparing the TIA. This document includes the analysis of bicycle facilities, parking, site circulation and pedestrian access, as well as roadways, and may be downloaded from www.vta.org/news/vtacmp/Technical Guidelines. For more information on TIA guidelines, please call Murali Ramanujam, Development & Congestion Management Division, at 408-952-8905.

VTA Support Services

For more information, general questions, technical support, or to arrange a meeting with VTA staff to discuss On-Site Planning and Design of this or any other development projects, please contact George Tacké, Development & Congestion Management Division, at 408-321-5865 or via email at george.tacke@vta.org. VTA staff look forward to assisting you.

Thank you for the opportunity to review this project. If you have any questions, please call me at (408) 321-5784.

Sincerely,

Roy Molseed
Senior Environmental Planner

RM:kh

cc: Samantha Swan, VTA

John Lattyak
6405 Church Street
Gilroy, CA 95020
408-848-1431

RECEIVED
MAY 12 2005
Gilroy Planning Div.

May 9, 2005

City Of Gilroy Planning Division
7351 Rosanna Street
Gilroy, CA 95020

Attention: Cidney Caper, Planner II

Subject: ~~Barberi USA Amendment (Gilroy USA Amendment 04-02)~~

Regarding the letter I received soliciting input for the EIR on the subject issue.

There is one point that must be addressed.

Noise

There are a number of homes on Luchessa Avenue that have NO sound protection.

A number of years ago, when Luchessa Avenue (formerly named Thomas Road), was being expanded and rerouted, an EIR was generated. This was done in conjunction with the building of the levee, new bridge, and approved housing growth west of Princevalle. The EIR incorrectly stated that all home along Thomas Road (since renamend Luchessa Avenue) had sound protection. At the EIR hearing a number of citizens, myself included, addressed the council indicating this was incorrect. At the intersections of Thomas (now Luchessa) and Hyde Park, Church, and Princevalle the corner homes have no sound protection. At the meeting the mayor and council indicated that, at such time that the traffic would increase due to development, sound walls would be added. Unfortunately, no specific trigger was put in place to initiate the action and today, with the heavy, relatively high speed traffic along Luchessa the noise levels have become intolerable, sometimes making conversations in my backyard and my house with the windows open impossible.

It is imperative that the new EIR be correct in this matter and that appropriate provisions are made to ensure quiet enjoyment of the properties not protected by sound walls.

If you have any questions, please feel free to contact me.

05/09/2005

John Lattyak

CITY OF GILROY

COMMUNITY DEVELOPMENT DEPARTMENT

Planning Division
7351 Rosanna Street
Gilroy, Ca 95020
(408) 846-0440

TRANSMITTAL SHEET

TO: Richard James	FROM: Cydney Casper
COMPANY: EMC Planning Group	DATE: 6/7/2005
FAX NUMBER: 831-649-8399	TOTAL NO. OF PAGES INCLUDING COVER: 19
PHONE NUMBER: 831-649-1799	SENDER'S REFERENCE NUMBER:
RE: Barberi Supplemental EIR	YOUR REFERENCE NUMBER: USA 04-02, Z 05-07

☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

Richard, Attached are the comments received from various agencies regarding the NOP for the Barberi project.

I have listed below a summary of the comments received from the neighbors on the north side of the property during the Scoping meeting. I have never had anyone show up for these meetings before, but we had about 20 neighbors show up to express their opposition to the property developing at all. Neighbor comments:

- ✓ Noise along Luchessa Avenue from traffic
- ✓ Traffic volumes going to Santa Theresa Blvd
- ✓ The need for widening the Luchessa Avenue bridge
- ✓ Traffic back-up on Luchessa Avenue from the railroad tracks
- ✓ The location of the flood zone area and concerns that any development will not affect flooding on the properties to the north of Luchessa
- ✓ Concerns that the levy does not go far enough to prevent flooding
- ✓ Concerns over the widening of Luchessa Avenue
- ✓ Air quality
- ✓ Loss of agricultural lands-agricultural mitigation
- ✓ Hazardous materials concerns for homes around the Suburban Propane site

Please let me know if there is anything else you need.

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Sean Walsh
Director

RECEIVED
MAY 10 2005
Gilroy Planning Div.

Notice of Preparation

May 6, 2005

To: Reviewing Agencies

Re: Barberi Urban Service Area (USA) Amendment Gilroy USA 04-02
SCH# 1998102079

Attached for your review and comment is the Notice of Preparation (NOP) for the Barberi Urban Service Area (USA) Amendment Gilroy USA 04-02 draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Cydney Casper
City of Gilroy
7351 Rosanna Street
Gilroy, CA 95020

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Scott Morgan
Associate Planner, State Clearinghouse

Attachments
cc: Lead Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

NOP Distribution List

County: Santa Clara

SCH# 1998102079

Resources Agency

- [■] Resources Agency
  Nadell Gayou
- [ ] Dept. of Boating & Waterways
  David Johnson
- [ ] California Coastal Commission
  Elizabeth A. Fuchs
- [ ] Colorado River Board
  Gerald R. Zimmerman
- [■] Dept. of Conservation
  Roseanne Taylor
- [ ] California Energy Commission
  Environmental Office
- [ ] Dept. of Forestry & Fire Protection
  Allen Robertson
- [ ] Office of Historic Preservation
  Wayne Donaldson
- [■] Dept of Parks & Recreation
  S. Noah Tilghman
  Environmental Stewardship Section
- [ ] Reclamation Board
  DeeDee Jones
- [ ] Santa Monica Mountains Conservancy
  Paul Edelman
- [ ] S.F. Bay Conservation & Dev't. Comm.
  Steve McAdam
- [■] Dept. of Water Resources
  Resources Agency
  Nadell Gayou

Fish and Game

- [ ] Depart. of Fish & Game
  Scott Flint
  Environmental Services Division
- [ ] Fish & Game Region 1
  Donald Koch
- [ ] Fish & Game Region 2
  Banky Curtis
- [■] Fish & Game Region 3
  Robert Floerke
- [ ] Fish & Game Region 4
  William Laudermilk
- [ ] Fish & Game Region 5
  Don Chadwick
  Habitat Conservation Program
- [ ] Fish & Game Region 6
  Gabrina Gatchel
  Habitat Conservation Program
- [ ] Fish & Game Region 6 IM
  Tammy Allen
  Inyo/Mono, Habitat Conservation Program
- [ ] Dept. of Fish & Game M
  George Isaac
  Marine Region

Other Departments

- [ ] Food & Agriculture
  Steve Shaffer
  Dept. of Food and Agriculture
- [ ] Depart. of General Services
  Public School Construction
- [ ] Dept. of General Services
  Robert Sleppy
  Environmental Services Section
- [■] Dept. of Health Services
  Veronica Ramerez
  Dept. of Health/Drinking Water

Independent Commissions,Boards

- [ ] Coachella Valley Mountains Conservancy
- [ ] Delta Protection Commission
  Debby Eddy
- [ ] Office of Emergency Services
  Dennis Castrillo
- [ ] Governor's Office of Planning & Research
  State Clearinghouse
- [■] Native American Heritage Comm.
  Debbie Treadway
- [ ] Public Utilities Commission
  Ken Lewis
- [ ] San Gabriel & Lower LA Rivers
- [ ] San Joaquin River Conservancy
- [ ] State Lands Commission
  Jean Sarino
- [ ] Tahoe Regional Planning Agency (TRPA)
  Cherry Jacques

Business, Trans & Housing

- [ ] Caltrans - Division of Aeronautics
  Sandy Hesnard
- [ ] Caltrans - Planning
  Terri Pencovic
- [■] California Highway Patrol
  John Olejnik
  Office of Special Projects
- [ ] Housing & Community Development
  Lisa Nichols
  Housing Policy Division

Dept. of Transportation

- [ ] Caltrans, District 1
  Mike Eagan
- [ ] Caltrans, District 2
  Don Anderson
- [ ] Caltrans, District 3
  Jeff Pulverman
- [■] Caltrans, District 4
  Tim Sable
- [ ] Caltrans, District 5
  David Murray
- [ ] Caltrans, District 6
  Marc Birnbaum
- [ ] Caltrans, District 7
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  John Pagano
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- [ ] Caltrans, District 10
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- [ ] Caltrans, District 11
  Mario Orso
- [ ] Caltrans, District 12
  Bob Joseph

Cal EPA

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  Jim Lamer
- [ ] Transportation Projects
  Kurt Karperos
- [ ] Industrial Projects
  Mike Tollstrup
- [ ] California Integrated Waste Management Board
  Sue O'Leary
- [ ] State Water Resources Control Board
  Jim Hockenberry
  Division of Financial Assistance
- [ ] State Water Resources Control Board
  Student Intern, 401 Water Quality Certification Unit
  Division of Water Quality
- [ ] State Water Resources Control Board
  Steven Herrera
  Division of Water Rights
- [ ] Dept. of Toxic Substances Control
  CEQA Tracking Center
- [ ] Department of Pesticide Regulation

Regional Water Quality Control Board (RWQCB)

- [ ] RWQCB 1
  Cathleen Hudson
  North Coast Region (1)
- [ ] RWQCB 2
  Environmental Document Coordinator
  San Francisco Bay Region (2)
- [■] RWQCB 3
  Central Coast Region (3)
- [ ] RWQCB 4
  Jonathan Bishop
  Los Angeles Region (4)
- [ ] RWQCB 5S
  Central Valley Region (5)
  - [ ] RWQCB 5F
    Central Valley Region (5)
    Fresno Branch Office
  - [ ] RWQCB 5R
    Central Valley Region (5)
    Redding Branch Office
- [ ] RWQCB 6
  Lahontan Region (6)
  - [ ] RWQCB 6V
    Lahontan Region (6)
    Victorville Branch Office
- [ ] RWQCB 7
  Colorado River Basin Region (7)
- [ ] RWQCB 8
  Santa Ana Region (8)
- [ ] RWQCB 9
  San Diego Region (9)

- [ ] Other _____

Last Updated on 3/11/05

Document Details Report
State Clearinghouse Data Base

SCH# 1998102079
Project Title Barberi Urban Service Area (USA) Amendment Gilroy USA 04-02
Lead Agency Gilroy, City of

Type NOP Notice of Preparation

Description The proposed project is an amendment to the City of Gilroy USA to include a 27.7-acre area with a Gilroy General Plan land use designation of Neighborhood District. Four parcels are included in the amendment request.

Lead Agency Contact

Name Cydney Casper
Agency City of Gilroy
Phone 408-846-0440 **Fax**
email
Address 7351 Rosanna Street
City Gilroy **State** CA **Zip** 95020

Project Location

County Santa Clara
City Gilroy
Region
Cross Streets Montery Street, Luchessa Avenue
Parcel No. 808-21-008, 808-21-009, 808-21-016; 808-21-018
Township **Range** **Section** **Base**

Proximity to:

Highways 101, 152
Airports
Railways
Waterways Uvas Creek
Schools
Land Use Neighborhood District , Currently Santa Clara County A-20; Prezone to Neighborhood District

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Biological Resources; Geologic/Seismic; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Water Quality; Landuse; Minerals; Noise; Population/Housing Balance; Public Services; Traffic/Circulation; Other Issues

Reviewing Agencies Resources Agency; Department of Conservation; Department of Parks and Recreation; Department of Water Resources; Department of Fish and Game, Region 3; Department of Health Services; Native American Heritage Commission; California Highway Patrol; Caltrans, District 4; Regional Water Quality Control Board, Region 3

Date Received 05/05/2005 **Start of Review** 05/05/2005 **End of Review** 06/03/2005

Note: Blanks in data fields result from insufficient information provided by lead agency.

Appendix B

Fiscal Analysis

ADMINISTRATIVE DRAFT

FISCAL IMPACT ANALYSIS OF THE BARBERI USA AMENDMENT

July 8, 2005

Prepared for

City of Gilroy

Prepared by

Applied Development Economics
2029 University Avenue • Berkeley, California 94704 • (510) 548-5912
1029 J Street, Suite 310 • Sacramento, California 95814 • (916) 441-0323
www.adeusa.com

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SETTING

PROJECT SITE

The project site is currently used mainly for agriculture and is in County jurisdiction. As such, the land generates a small amount of property taxes, which are distributed to a variety of taxing agencies serving the site, including the County of Santa Clara, the local school district and county education office, the South Santa Clara County Fire District, the Gavilan Water District and others. With an assessed value of about $2.5 million, the site generates about $25,000 per year in total property taxes, of which less than $4,000 go to County Government. More than $18,000 of the taxes go to local schools and other educational agencies in the County. No property taxes currently go to the City of Gilroy from the site. The site currently generates very little if any cost for services from these agencies.

CITY BUDGET

For the Fiscal Year 2004-2005, the City of Gilroy has adopted a General Fund Expenditure Budget of $37.5 million, against about $35 million in current revenues (Table 1). Similar to many cities and counties in California, Gilroy has had to use fund reserves to balance its budget, due to the increasing shift of local government revenues to the state. In his budget message to the City Council, the City Administrator indicated that the City has so far been able to avoid major reductions in City staff, but this may become necessary in future years if significant improvements are not made in State budgetary affairs.

TABLE 1
City of Gilroy Budget 2004-2005

REVENUES	
GENERAL FUND	**2004-05**
Property Tax	$6,249,169
Sales Tax	$13,111,620
Transient Occupancy Tax	$795,104
Utility Users Tax	$3,763,131
Real Estate Transfer Fee	$372,359
Gas & Electric Franchise Fee	$437,115
Garbage Franchise Fee	$386,801
Cable TV Franchise Fee	$146,000
Motor Vehicle Tax	$332,180
Business Licenses	$540,000
Building Permits	$1,023,000
Other Lincenses & Permits	$169,000
Fines & Forfeitures	$230,000
Charges for Services	$4,634,278
Use of Money & Property	$819,800
Other Revenues	$663,395
Other Financing Sources	$368,316
General Fund Subtotal	**$34,041,268**
SPECIAL REVENUE FUNDS	
Gas Tax	$977,912
TOTAL REVENUES	**$35,019,180**
EXPENDITURES	
GENERAL FUND	
City Council	$201,726
City Attorney	$408,500
Administrative Services	$5,375,943
Police	$16,184,032
Fire	$7,310,073
Landscape Maintenance	$1,690,057
Street Maintenance	$868,977
Other Community Services	$1,479,573
Community Development	$3,992,807
General Fund Subtotal	**$37,511,688**
SPECIAL REVENUE FUNDS	
Gas Tax	$1,035,072
TOTAL EXPENDITURES	**$38,546,760**

Source: City of Gilroy Financial Plan (2004-2005 to 2008-2009)

PROJECT DESCRIPTION

The project includes annexation of four parcels to the City of Gilroy. The annexation would cause a shift in the property tax distribution and would extend City jurisdiction and service responsibilities over the site. Development of the property is anticipated to include 220 medium density single family units and 30 high-density units. In addition, 18,000 sq.ft. of commercial space would be possible on two of the parcels (Table 2).

TABLE 2
Project Characteristics

			Assessed Value		Taxable Sales
LAND USE	**Units**	**Population**	**Per Unit**	**Total**	**Per Sq.Ft.**
RESIDENTIAL					
High Density	30	87	$386,250	$11,587,500	
Medium Density	220	748	$650,500	$143,110,000	
NON-RESIDENTIAL	**Sq. Ft.**	**Employment**			
Retail Commercial	18,000	51	$184	$3,308,940	$175

Source: EMC Planning Group and ADE Inc.

For purposes of calculating service demands and tax revenues, ADE has estimated the following socioeconomic characteristics for the project. We estimate the project would house 835 residents and would support 51 jobs onsite. Based on a review of prevailing real estate prices for the area, we estimate the medium density units would sell at an average price of $650,500 while the high-density units would be valued at about $386,000. The high-density values are consistent with townhouse prices in the area. If these units are developed as rental apartments, the assessed values may be lower. At the sales prices used in this analysis, the residential component of the project would create nearly $155 million in assessed value, compared to the existing assessed value of about $2.5 million for the property.

We also estimate that the commercial space would be valued at about $184 per sq.ft. for a total assessed value of about

$3.3 million. The commercial space would generate about $3.1 million annually in taxable sales, or about $175 per sq.ft. The sales tax yield from this is estimated in the next section of the report.

PROJECT IMPACT ON THE CITY OF GILROY

PROPERTY TAX SHIFT

The initial fiscal effect of completing the annexation of the subject property to the City of Gilroy would be to shift the property tax distribution. As indicated in Table 3 below, The City is estimated to get about 8.4% of the one percent base tax (additional tax amounts charged for bond indebtedness and special assessments would not be affected by the annexation). This amount would come primarily from the South Santa Clara Fire Protection District, as jurisdiction for fire protection services is shifted from the District to the City. The County General Fund and Library Fund would also be slightly affected. The percent figures shown in Table 3 reflect a 35 percent shift of revenues from local agencies to educational agencies through the State Educational Revenue Augmentation Fund (ERAF). The actual ERAF shift has varied over the years so the figures shown in the table must be viewed as an approximation of the property tax share the City may actually get when the proposed project is completed.

TABLE 3
Current and Estimated Future Property Tax Distribution

Taxing Agency	Current Distribution*	Estimated Future Distribution*
County General Fund	15.80%	15.21%
County Library	2.86%	2.73%
Educational Agencies	72.90%	71.60%
So SC County Fire Dist.	6.37%	0.00%
SCV Water	1.11%	1.11%
Bay Area AQMD	0.13%	0.13%
Gavilan Water Dist.	0.39%	0.39%
SCVWD State Water Project	0.33%	0.33%
City of Gilroy	0.00%	8.39%
Other	0.13%	0.13%
Total	**100.00%**	**100.00%**

Source: ADE, based on data provided by the Santa Clara County Controllers Office.

*Current and future distributions reflect an ERAF shift of 35% of local revenues to Educational Agencies.

At full buildout, the project is projected to create $132,488 in annual property tax revenues for the City of Gilroy (Table 4). It would also create new revenues for all of the other taxing agencies shown in second column of Table 3.

TABLE 4
Annual Fiscal Impact to City of Gilroy at Full Build-out

	Total	Single Family (High)	Single Family (Medium)	Retail Commercial
REVENUES				
Property Tax	$132,488	$9,716	$119,998	$2,775
Sales Tax	$180,100	$14,985	$133,615	$31,500
Utility Users Tax	$38,766	$3,543	$30,463	$4,760
Real Estate Transfer Fee	$9,170	$680	$8,394	$97
Gas & Electric Franchise Fee	$4,503	$412	$3,539	$553
Garbage Franchise Fee	$5,007	$488	$4,196	$323
Cable TV Franchsise Fee	$1,890	$184	$1,584	$122
Motor Vehicle Tax	$6,004	$626	$5,378	$0
Business Licenses	$1,366	$0	$0	$1,366
Other Lincenses & Permits	$2,188	$213	$1,833	$141
Fines & Forfeitures	$2,977	$290	$2,495	$192
Charges for Services	$59,987	$5,847	$50,271	$3,869
Use of Money & Propery	$11,556	$997	$9,489	$1,070
General Fund Subtotal	$456,002	$37,981	$371,254	$46,767
SPECIAL REVENUE FUNDS				
Gas Tax	$17,674	$1,842	$15,833	$0
SUBTOTAL	**$473,676**	**$39,823**	**$387,087**	**$46,767**
EXPENDITURES				
General Government	$77,486	$7,553	$64,936	$4,997
Police	$209,488	$20,419	$175,558	$13,510
Fire	$94,622	$9,223	$79,297	$6,102
Community Services	$19,152	$1,867	$16,050	$1,235
Landscape Maintenance	$21,876	$2,132	$18,333	$1,411
Street Maintenance	$11,248	$1,096	$9,426	$725
Community Development	$22,223	$2,166	$18,623	$1,433
General Fund Subtotal	$456,094	$44,456	$382,223	$29,415
SPECIAL REVENUE FUNDS				
Gas Tax	$13,189	$1,306	$11,228	$655
SUBTOTAL	**$469,283**	**$45,762**	**$393,451**	**$30,069**
NET (COST)/REVENUE	**$4,393**	**($5,940)**	**($6,365)**	**$16,697**

OTHER CITY REVENUES

The sales tax is the major revenue source for Gilroy, and it is an important revenue for the proposed project as well. As noted in the project description, the commercial space as would generate about $3.1 million in taxable sales, of which the City would receive one percent in sales taxes. However, a commercial center of this size would not be expected to meet all the needs of the project residents, so the City is likely to see additional sales tax revenues from the project residents as they shop in other commercial centers in the City. These amounts are shown in the residential columns in Table 4 and are based on the typical per capita sales gain the City sees from its existing residents. However, we have deducted the sales from the commercial component of the project from the residential sales tax figures to avoid double-counting any taxable sales.

Many of the other revenues shown in Table 4 are calculated on a per capita basis which weights residential population and non-residential employment levels in terms of their relative use of City services and payment of related fees and charges. In general, non-residential uses are ascribed a certain service cost and revenue-generating capacity based on the employment they support, which is weighted half as much as the residential population. The rationale for this approach, which is a standard methodology for fiscal impact analysis, is that the residential population exerts a round-the-clock need for City services, while jobs usually consist of an eight-hour shift per day. The resulting calculations distribute two-thirds of service demands and related revenues to population and one-third to non-residential development, as measured by the number of jobs they support. This calculation has been used to estimate the amount of a number of the revenues in Table 4 including the garbage and cable TV franchise fees, other licenses and permits, fines and forfeitures, and charges for service. The estimates of the other revenues use different assumptions as described below.

The utility users tax and the gas and electric franchise fee are distributed 50/50 to residential and nonresidential uses since businesses are often proportionally high-energy users.

The real estate transfer fee is paid when property is sold. As the project develops and the units are sold for the first time, the City would receive more than $85,000 in transfer fees. The as the properties are resold over time, additional transfer fees would be paid. The figures shown in Table 4 represent this ongoing revenue, rather than the first time fees, and are calculated in proportion to the value of the overall development as reflected by the property tax revenues.

The Motor Vehicle in-Lieu fee has been the subject of much debate through the recent rounds of state budgetary policy changes. The fee is distributed to cities and counties based on population formulas; hence, in Table 4 the revenue is shown only for the residential development and not the commercial development. The actual amount of the fee is based on the 2004-2005 City budget estimates, but the actual revenues may be very different if the state continues to use these revenues to make up its own budget deficits.

Business licenses are paid only by the commercial businesses in the project. And finally, use of money and property basically reflect interest earned by the City on its bank accounts, along with a small amount of rental income from City facilities. In Table 4, this revenue is calculated as a percent of the other revenues generated by the project.

Based on these assumptions and calculations, we estimate that the project would cerate $456,000 annually in General Fund revenues for Gilroy at full buildout (in 2005 dollars).

In addition, the project would help the City in terms of the formulas the state uses to distribute gas taxes, which include a combination of population and road miles in each jurisdiction throughout the state. These funds must be used for road maintenance functions and are therefore maintained in a separate fund.

CITY SERVICE COSTS

The City service costs in Table 4 are also generally estimated using the per capita method described above in which non-residential uses are ascribed 50 percent of the proportional service cost as are residential uses. The General Government category is comprised of the City Council, the City Attorney and the Administrative Services Department, including the

City Manager's office. Landscape and street maintenance are actually subfunctions within the Community Services Department, but have been set out in Table 4 to identify the specific impact of the project on those services. Finally, for the Community Development department, the building permit and plan check fees have been deducted from the cost basis for the department before calculating the per capita cost factors. These fees will be paid by the project on a one-time basis, but since Table 4 is concerned exclusively with ongoing annual costs and revenues, it would not be appropriate to mix the one-time fees and the corresponding service costs in with the other figures.

The cost analysis represents an "average cost" approach to estimating fiscal impact, which essentially assumes the project will require the same level of service expenditures are the City currently experiences for existing development. In reality, the City's budget policy would likely not permit increases in General Fund positions unless there were dedicated funding sources to offset the cost. In this fiscal environment, the cost estimated in Table 4 may be viewed as the "imputed cost" of the additional service burden the project would create on City government. In some cases these may be actual costs in terms of additional overtime pay for existing staff or increases in supplies and materials costs.

Table 5 provides a rough indication of the equivalent staffing levels represented by the costs in Table 4. In several cases, the figures do not represent a full or even half-time position and it is likely the City would not incur these personnel costs but would provide services to the project with its existing staff. In that case, the net fiscal impact of the project would be more beneficial than is indicated in Table 4.

NET FISCAL IMPACT

The analysis discussed above indicates that the residential portions of the project would generate a small negative fiscal impact, if the City in fact realizes all of the costs shown in Table 4. This adverse impact would, however, be offset by the net revenue from the commercial space. This net benefit is primarily fueled by sales taxes, which are supported by household incomes from the residential development. From this perspective, we may conclude that even the residential

part of the project will pay for the services it requires so long as the City can capture the retail spending from the resident households.

TABLE 5
Potential Impact on City Personnel

EXPENDITURES	City Budget	No. of Employees	Expenditure Per Employee	Barberi Project Budget Impact	No. of Additional Employees Needed to Support New Development
Police	$16,094,032	104	$154,750	$209,488	1.4
Police Patrol	$8,583,544	58	$147,992	$111,029	0.8
Fire	$7,310,073	42	$174,049	$94,622	0.5
Fire Operations	$5,888,015	38	$154,948	$76,644	0.5
Community Services	$1,311,122	26	$50,428	$19,152	0.4
Landscape Maintenance	$1,690,057	6	$281,676	$21,876	0.1
Street Maintenance	$868,977	8	$108,622	$11,248	0.1
Community Development	$3,992,807	44	$90,746	$22,223	0.2

Source: ADE Inc.

PROJECT IMPACT ON SANTA CLARA COUNTY

Since this project involves an annexation process, LAFCO requires an analysis of the impact of the development on the County of Santa Clara. The recommended methodology for the analysis involves an average cost approach similar to that used for the City analysis in the previous section, including similar assumptions about the relative impact of residential vs. non-residential development.

Table 6 shows the elements of the analysis. The County is experiencing even more difficult budget problems than is Gilroy, so the future budget projections show substantial deficits. Under these circumstances, it would be difficult for most developments to show any kind of positive fiscal benefit for the County. The Barberi project would cost the County more than $14,000 in net service costs. Unless improvements are made at the state level in County finances, these deficits would escalate over time as shown in Table 6.

TABLE 6
Santa Clara County Fiscal Impacts

Population Projections	Base Year	+5 Years	+10 Years
Population and/or Employment Generated by Proposal	886	886	886
Proposal Generated Service Population	861	861	861
County Population and Employment	2,653,940	2,847,920	3,036,150
County Service Population	2,202,020	2,351,710	2,497,625
County General Fund Expenditure and Revenue Projections			
Expenditures For County	$1,858,900,000	$2,434,000,000	$3,187,022,433
Revenues For County	$1,822,500,000	$2,390,700,000	$3,136,047,457
Total General Fund Net Balance	($36,400,000)	($43,300,000)	($50,974,976)
Fiscal Impact of Proposal			
General Fund Impact per Capita	($17)	($18)	($20)
Net County General Fund Impact due to Proposal (Surplus/Deficit)	($14,224)	($15,844)	($17,562)

Source: ADE.

Appendix C

Vacant Land Analysis

VACANT RESIDENTIAL LAND SURVEY

Gilroy Urban Service Area Amendment 04-02

PREPARED FOR

City of Gilroy Planning Division
Cydney Casper, Planner II
7351 Rosanna Street
Gilroy, CA 95020
Tel 408.846-0440

PREPARED BY

EMC Planning Group Inc
301 Lighthouse Avenue Suite C
Monterey CA 93940
Tel 831.649.1799
Fax 831.649.8399
contactus@emcplanning.com
www.emcplanning.com

January 20, 2005

Gilroy Residential Land Use Survey

Background

A city's urban service area (USA) is defined as that area to which the city provides urban services such as water and sewer, or expects to provide these services within five years of the adoption of a capital improvement program. Thus, the USA is expected to accommodate approximately five years of urban development. In Santa Clara County, jurisdictional boundary changes, including USA amendments, are reviewed and acted upon by the Santa Clara County Local Agency Formation Commission (LAFCO). Santa Clara County does not generally allow urban development to occur outside of established USAs.

The City of Gilroy is requesting an amendment to its existing USA. The USA amendment is officially identified as Gilroy USA Amendment 04-02. In acting upon a USA amendment request, LAFCO requires the preparation of an appropriate environmental review document, a fiscal analysis, and a vacant land analysis of the existing USA. LAFCO utilizes the vacant land analysis in assessing the need for expansion of the USA, based on a goal of maintaining an approximate five-year supply of developable land within the USA. This vacant land analysis has been prepared to provide this information to LAFCO in their decision on Gilroy USA Amendment 04-02.

The request for Gilroy USA Amendment 04-02 includes 63.8 acres of which 37.8 is designated for Low Density Residential and 26.0 is designated Neighborhood District in the Gilroy General Plan. Therefore, this vacant land survey studies available residential land.

Defining Vacant Land

The survey identifies land as vacant (or not vacant) as of December 21, 2004. Several sites that are physically vacant have been classified as not vacant. This reflects the fact that development entitlements have been secured and development is expected in the near term. In cases where recently subdivided land is expected to be immediately developed by the subdivider, the land is considered not to be vacant. However, where subdivided land is expected to be sold as individual lots for later development, land is considered vacant until an architectural and site application is approved. Land that was in rural residential use, but planned for higher densities was considered vacant.

Quantifying Vacant Land Supply

Quantification Methods

Quantifying the existing supply of vacant land within the Gilroy USA involved mapping land thought to be potentially vacant, and then eliminating those parcels for which building approvals had been obtained, as defined above. Figure 1 and Figure 2 show the parcels determined to be vacant. It became apparent that there were some areas in the City that required special consideration: the Hecker Pass Specific Plan (HPSP) area, the Glen Loma Specific Plan (GLSP) area, the Eagle Ridge development, and the Country Estates development. These areas are described below, followed by the general approach to the remaining parts of the City.

Hecker Pass Specific Plan

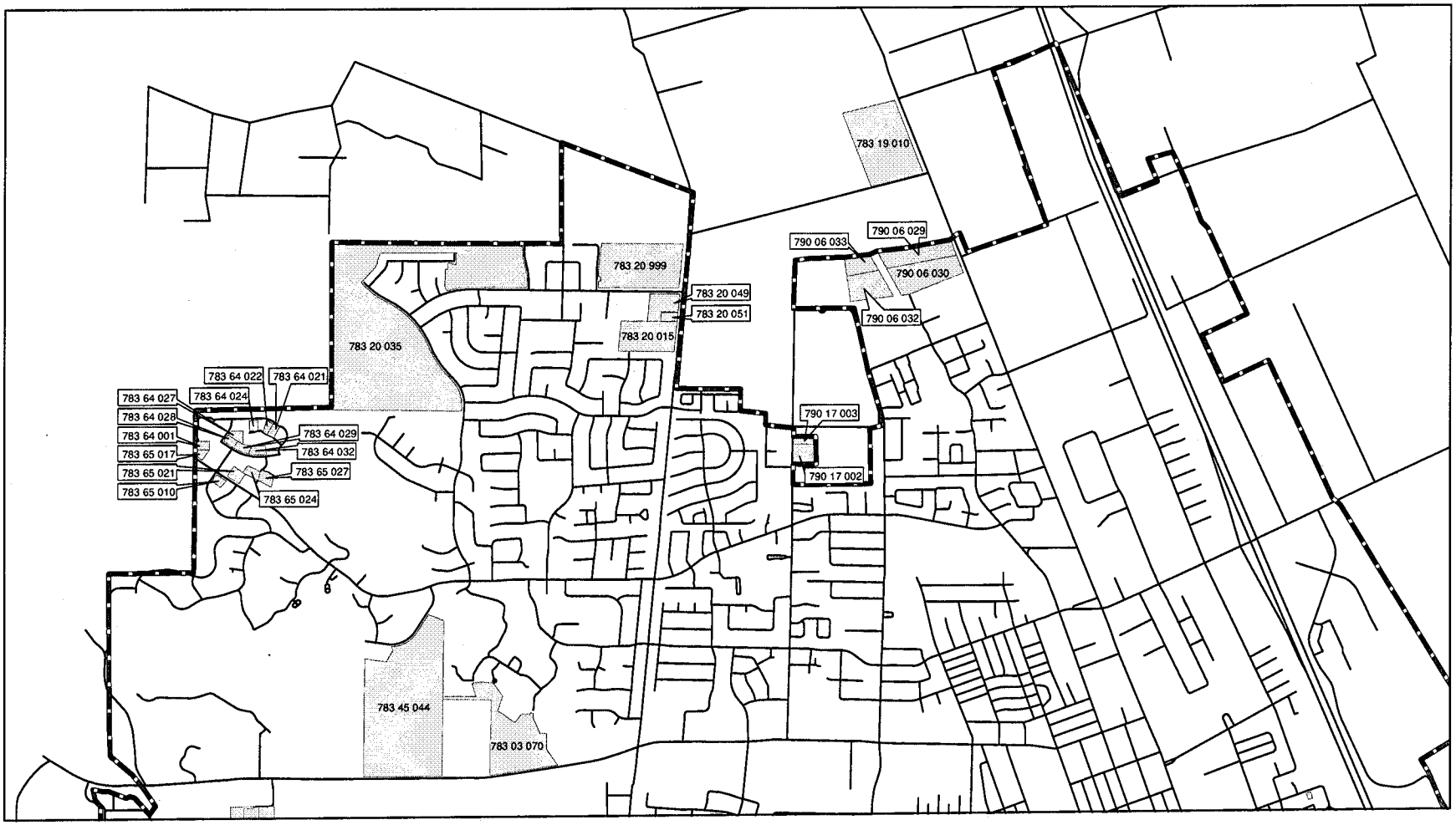
The HPSP area encompasses 145 acres and includes development of 530 housing units. No exact level of density has been provided for the HPSP area, although lot size ranges are specified. This survey classifies future HPSP development as Low and Medium Density Residential. Table 1 presents a breakdown of planned lot sizes within the HPSP.

TABLE 1

Hecker Pass Specific Plan Residential Land Inventory

Square Footage of Lots	Units	Equivalent Zoning	Average Density (units per acre)	Percentage of Total Units
Lots larger than 6,000 square feet	112	R-1	5.4 or less	21.13% Low Density
Lots between 3,500-6,000 square feet	340	R-1	6.9	64.15% Low Density
Lots smaller than 3,500 square feet	78	R-2	9.3 or more	14.7% Medium Density
Totals (including open space)	**530**		**3.65**	

Source: City of Gilroy, RJA Associates, Inc., and EMC Planning Group Inc.



Source: EMC 2005, City of Gilroy 2004

Figure 1
Vacant Land Parcels, Northern Half
City of Gilroy Vacant Residential Land Inventory

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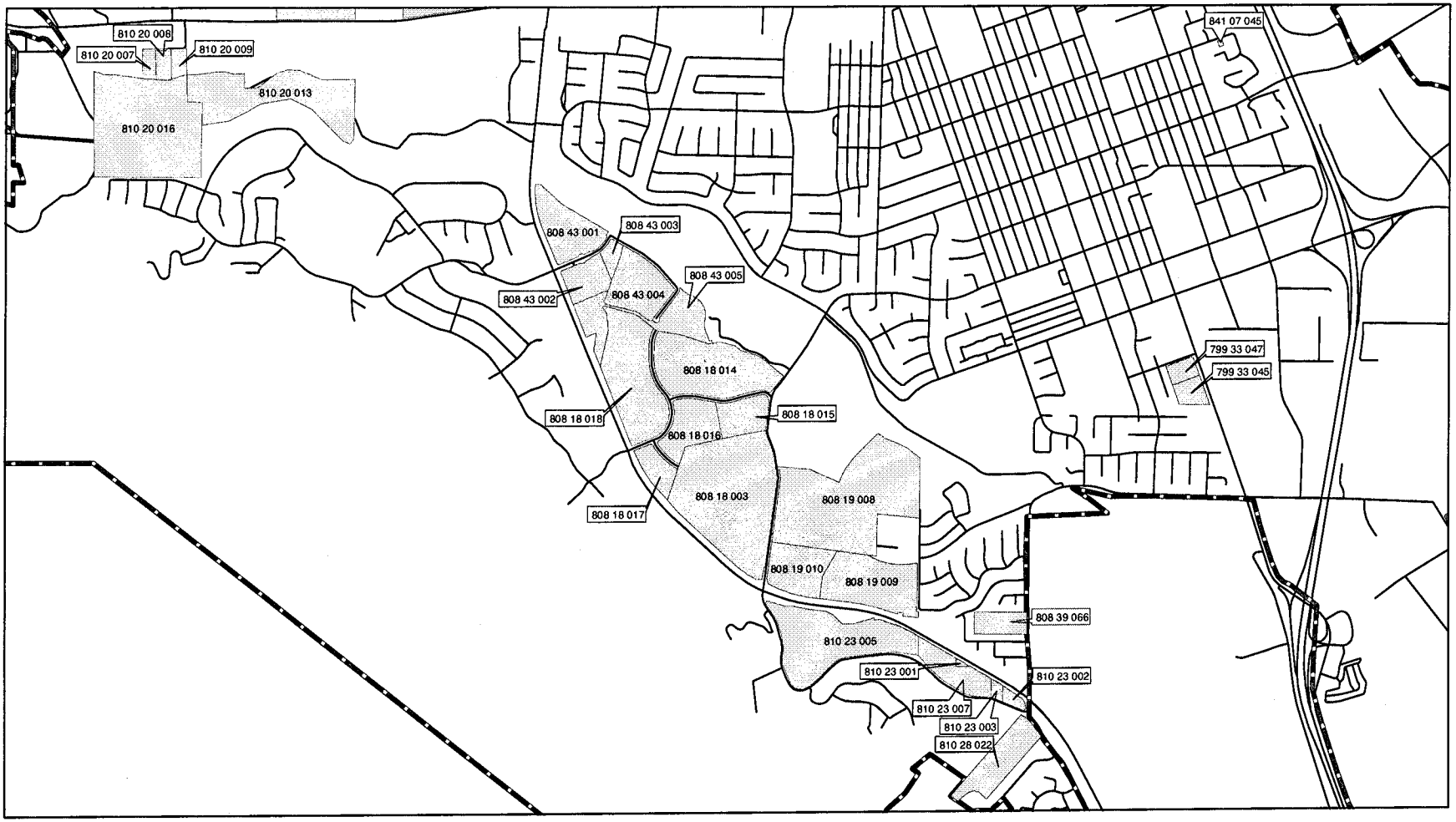

Source: EMC 2005, City of Gilroy 2004

Figure 2
Vacant Land Parcels, Southern Half
City of Gilroy Vacant Residential Land Inventory

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TABLE 2

Glen Loma Specific Plan Residential Land Inventory

Land Use Zoning	Acres	Percent of Residential Acreage	Number of Units	Average Units per Acre	Percent of Total Units
R1	105.6	59.0	707	6.7	43.1
R2	33.5	18.7	286	8.5	17.4
R3	22.7	12.7	326	14.4	19.9
R4	17.1	9.6	322	18.8	19.6
Totals	**178.9**		**1,641**	**9.2**	

Source: City of Gilroy, RJA Associates, Inc., and EMC Planning Group Inc.

Glen Loma Specific Plan

The GLSP accounts for almost half of the vacant residential land in the City of Gilroy. The City has not yet adopted the GLSP, but based on the most recent draft, it is expected that 178 acres and 1,641 units will be dedicated to residential uses. The GLSP provides a specific mix of residential densities. This development information is summarized in Table 2.

Eagle Ridge

The Eagle Ridge development is fully developed and no vacant land within that development was included in this report.

Country Estates

Currently fifteen lots within the Country Estates development have not received architectural and site review approval. These lots are included in vacant land survey because they have not received full development approval.

Remaining Areas

For the remaining land within the City, a list of all vacant land with a residential designation under the Gilroy General Plan was compiled. The gross acres of residential land was reduced by 25 percent to account for street right of ways, park dedications, and other non-residential uses.

Classification of Vacant Land by Land Use Designation/Density

Vacant land was classified by General Plan Land Use designation and zoning district. Some assumptions were necessary to correlate General Plan land use designation with zoning districts. Several parcels within the City of Gilroy have a residential general plan designation but no corresponding residential zoning designation. For example, some parcels within residential General Plan designations have agricultural or industrial zoning remaining from the previous General Plan designation for those sites, or never re-zoned following annexations. Using the General Plan land use designations as a guide, these parcels were placed in their respective zoning districts.

Land designated as Neighborhood District, as well as the land within the HPSP and GLSP areas is expected to be developed at several residential densities, and therefore correlates to two or more zoning districts.

The amount of vacant land in each General Plan residential category and the corresponding zoning district is listed in Table 3.

TABLE 3

Vacant Residential Land within the Existing Gilroy USA

General Plan Designation	Net Acres Vacant	Average General Plan Density (units per acre)	Corresponding Zoning
Neighborhood District	101.9	9.25	R-1, R-2, R-3, R-4
Low Density	24.0	5.125	R-1
Rural	27.7	0.4	R-1
Hillside	40.8	2.25	R-H
Medium Density	0	12	R-2, R-3
High Density	0	23	R-4
Hecker Pass Specific Plan	145.0	-	R-1, R-2
Glen Loma Specific Plan	178.9	-	R-1, R-2, R-3, R-4
Country Estates	8.5	-	R-H
TOTAL	497.0	5.37	

Notes: Net acres vacant accounts for 25 percent decrease from gross acres. Land within HPSP, GLSP, and Country Estates has been omitted from other General Plan categories.

Source: EMC Planning Group Inc.

Defining the Five Year Supply

A definition of what constitutes a five-year supply of vacant land in Gilroy was established for residential development. The Residential Development Ordinance (RDO) process, the housing forecasts by the Association of Bay Area Governments (ABAG), and the issuance of building permits were all taken into consideration.

Residential Development Ordinance (RDO)

Residential development in the City of Gilroy is largely controlled through the Residential Development Ordinance (RDO). The RDO sets a ten-year goal of 3,450 residential units. The RDO process targets 900 units for exempt housing with 530 for affordable housing, 120 units for senior housing, 100 units for affordable senior housing, 100 for downtown housing and an addition 150 for small project exemptions. The small project exemptions are allocated for developments of fewer than 12 units. Under RDO allocations about 345 units are expected each year or approximately 1,725 in a five year period. A small number of small projects (single houses or minor subdivisions) are typically approved each year outside of the RDO process.

Association of Bay Area Governments (ABAG) Forecasts

ABAG issues a regional housing needs determination for each City in the greater Bay Area. ABAG has determined that the City of Gilroy should provide 3,746 housing units from 1999 to 2006. This is an annual average of 535 housing units or 2,675 in a five-year period, about eight percent higher than is expected under the Gilroy RDO.

Building Permits

Table 1 presents residential building permit activity from 2000-2004 and represents the actual rate of residential build out during that period. Table 4 summarizes data provided by the Gilroy Building Division.

Five Year Supply

The three approaches to defining a five-year supply yield results of 345 (RDO), 535 (ABAG), and 280 (building permits) residential units per year. The RDO process provides a consistent metering of residential development, and is not subject to annual variations due to economic fluctuations, as building permits can be. The ABAG needs projections do not relate to actual development. Therefore, the number of units allowed under the City's RDO process has been used to establish the five-year residential supply as 1,725 units. Because the potential for individual houses and minor subdivisions (subdivisions of four or fewer parcels) is relatively small, these have not been considered in arriving at the five-year supply.

TABLE 4

Residential Permits Issued in the City of Gilroy 2000-2004

	2000	2001	2002	2003	2004	Average Residential Permits Issued	Percentage of Residential Permits
Single Family	173	268	290	255	293	255	91.1%
Two Family	0	2	10	3	8	4.6	1.6%
Medium Density	0	2	11	0	0	2.6	0.9%
High Density	0	14	75	0	0	17.8	6.4%
Total Residential Permits	173	286	386	258	301	280	

Source: Gilroy Building Department

Classifying Development Potential by Land Use Category

Generally, the number of acres of each land use was multiplied by its average potential density to determine the probable number of dwelling units. However, exceptions were made when calculating the rate of residential build out for some areas with special characteristics. For parcels with a Neighborhood District land use designation, development is expected to occur with a mix of residential densities, more or less in line with the General Plan description of the land use mix, and ranging from R-1 to R-4. Areas designated for Rural Residential or Low Density Residential were assumed to correlate to the R-1 zoning district.

Residential build out rates for each zoning category were determined by applying the percentage of permits issued for each category to the total build out rate. Thus, because single-family residential accounts for 91.1 percent of building permits, 91.1 percent of the annual average of 345 RDO units was used to establish the single-family build-out rate. For the areas with mixed densities, such as Neighborhood District, it was assumed that the mix of proposed development would more or less match the building permit mix, so rather than break out these areas by equivalent zoning district, the full annual average of 345 RDO units per year was used.

Tables and Graphs

Tables are presented showing build out potential under the general plan. Table 5 provides the development potential of vacant land with residential General Plan land use designations. Tables 6, 7, and 8 provide a graphic illustration of the actual residential supply when the densities of the Neighborhood District, HPSP, and GLSP are considered. Please refer to Appendix A (Spreadsheet of Vacant Residential Land Data) to understand how the parcel acreage and unit numbers were calculated.

TABLE 5

Vacant Residential Land Within the Existing Gilroy USA

General Plan Designation	Net Acres Vacant	Average Net Density	Probable Units	Residential Build out Rate	Supply in Years
Neighborhood District	101.94	9.25	943	345	2.7
Low Density	24.02	5.125	123	314	< half year
Rural Residential	27.68	.4	11	314	< half year
Hillside Residential	47.792	2.25	106	314	< half year
Hecker Pass Specific Plan	145	-	530	345	1.5
Glen Loma Specific Plan	178.9	-	1,641	345	4.8
Country Estates	8.2	-	15	314	< half year
Medium Density	0	12	0	9	0
High Density Residential	0	23	0	22	0
TOTAL	497.02		3,354		About 11

Note: Five-year supply is based on RDO and goals established by Gilroy City Council; build-out rate adjusted based on building permit data.

Source: EMC Planning Group Inc.

Low Density Residential

Areas that are planned exclusively for Low Density residential have a supply of less than half a year. However, additional low-density residential capacity is included within mixed density areas (Neighborhood District, GLSP, and HPSP). Calculating Neighborhood District at 82 percent low density, GLSP at 43.1 percent low-density and HPSP at 85.28 percent low-density the total remaining supply of low density residential is about six years. Table 6 provides a summary of the low-density residential supply in the City of Gilroy

TABLE 6

Supply of Low Density Residential

Area	Total Residential Supply in Years	Percentage of Low Density	Low Density Residential Supply in Years
Neighborhood District	2.7	82%	2.2
HPSP	1.5	85.28%	1.3
GLSP	4.8	43.1%	2.1
Low Density	.5	100%	0.5
TOTAL			6.1

Source: EMC Planning Group Inc.

Medium Density Residential

Currently, there is no supply of land that is planned exclusively for medium-density residential. Calculating Neighborhood District at 15 percent medium density, GLSP at 37.3 percent medium-density and HPSP at 14.7 percent medium density the total remaining supply of medium-density residential is about two and a half years. Table 7 provides a summary of the medium density residential supply in the City of Gilroy.

High Density Residential

Currently, there is no supply of land that is planned exclusively for high-density residential. Calculating Neighborhood District at three percent high density residential, GLSP at 19.6 percent high density residential the total remaining supply of high density residential is approximately one year. Table 8 provides a summary of the high-density residential supply in the City of Gilroy.

TABLE 7

Supply of Medium Density Residential

Area	Residential Supply in Years	Percentage of Medium Density	Medium Density Residential Supply in Years
Neighborhood District	2.7	15%	0.4
HPSP	1.5	14.7%	0.2
GLSP	4.8	37.3%	1.8
Medium	0	100%	0
TOTAL			2.4

Source: EMC Planning Group Inc.

TABLE 8

Supply of High Density Residential

Area	Residential Supply in Years	Percentage of High Density	High Density Residential Supply in Years
Neighborhood District	2.7	3%	0.1
HPSP	1.5	0	0
GLSP	4.8	19.6%	0.9
High	0	100%	0
TOTAL			1.0

Source: EMC Planning Group Inc.

Conclusion

The supply of vacant low-density land is about six years. In addition, about one and one half years of rural and hillside residential land remains. About two and one-half years of medium density and one year of high-density residential land remains. **When all of the various residential land use designations are added up the City of Gilroy has approximately an eleven year supply.**

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Appendix A

Residential Vacant Land Data

Country Estates							
783 64 024	0.37	RH	(Residential Hillside	2.25			
783 64 022	0.31	RH	(Residential Hillside	2.25			
783 64 021	0.40	RH	(Residential Hillside	2.25	RH	47.16	106.11
783 64 027	0.52	RH	(Residential Hillside	2.25	R1	368.54	1841.5
783 64 028	0.38	RH	(Residential Hillside	2.25	R2	35.18	296.07
783 64 001	0.53	RH	(Residential Hillside	2.25	R3	27.95	389.12
783 64 029	0.51	RH	(Residential Hillside	2.25	R4	18.11	345.23
783 64 032	0.59	RH	(Residential Hillside	2.25		496.94	2978
783 65 017	0.40	RH	(Residential Hillside	2.25			
783 65 024	0.59	RH	(Residential Hillside	2.25			
783 65 021	0.70	RH	(Residential Hillside	2.25			
783 65 027	0.71	RH	(Residential Hillside	2.25			
783 65 010	0.39	RH	(Residential Hillside	2.25			
Various Parcel							
783 20 035 (2)	40.792	RH	(Residential Hillside)	2.25			
Residential Hillside Totals	**47.16**			**2.25**		**106.11**	
783-20-035 (3)	12.25	R1	(Single Family Residential)	5.125			
799 33 047	2.42	R1	(Single Family Residential)	5.125			
799 33 045	3.15	R1	(Single Family Residential)	5.125			
783 20 049	2.80	R1	(Single Family Residential)	5.125			
783 20 051	0.63	R1	(Single Family Residential)	5.125			
790 17 003	0.75	R1	(Single Family Residential)	5.125			
841 07 045	0.13	R1	(Single Family Residential)	5.125			
810 28 022	11.88	R1	(Single Family Residential)	5.125			
783 20 999	15.41	R1	(Single Family Residential)	5.125			
783 20 035 (1)	21.9	R1	(Single Family Residential)	5.125			
790 06 029	5.17	R1	(Single Family Residential)	5.125			
790 06 033	2.25	R1	(Single Family Residential)	5.125			
790 06 030	7.37	R1	(Single Family Residential)	5.125			
790 06 032	4.37	R1	(Single Family Residential)	5.125			
783-19-010 (1)	14.76	R1	82%	5.125		75.64	
808 39 066 (1)	4.12	R1	82%	5.125		21.115	
810 23 007 (1)	6.60	R1	82%	5.125		33.8	
810 23 001 (1)	0.21	R1	82%	5.125		1.07	
810 23 003 (1)	0.73	R1	82%	5.125		3.74	
810 23 002 (1)	1.05	R1	82%	5.125		5.38	
	117.94			**5.125**		**604.45685**	
Glen Loma R1	**105.60**					**707**	
Hecker Pass	145					530	
R1 Single Family Residential Totals	**368.54**					**1841.45685**	

783-19-010 (2)	0.90	R2	(Two Family Residential	6	5.4
808 39 066 (2)	0.25	R2	(Two Family Residential	6	1.5
810 23 007 (2)	0.41	R2	(Two Family Residential	6	2.4
810 23 001 (2)	0.01	R2	(Two Family Residential	6	0.06
810 23 003 (2)	0.04	R2	(Two Family Residential	6	0.24
810 23 002 (2)	0.06	R2	(Two Family Residential	6	0.36
	1.68			**6**	**10.068**
Glen Loma R2	**33.50**				**286**
R2 Two Family Residential Totals	**35.18**				**296.068**

790 17 002	1.90	R3	(Medium Density Residential)	12	22.8
783-19-010 (3)	1.80	R3	(Medium Density Residential)	12	21.6
808 39 066 (3)	0.50	R3	(Medium Density Residential)	12	6
810 23 007 (3)	0.81	R3	(Medium Density Residential)	12	9.72
810 23 001 (3)	0.03	R3	(Medium Density Residential)	12	0.36
810 23 003 (3)	0.09	R3	(Medium Density Residential)	12	1.08
810 23 002 (3)	0.13	R3	(Medium Density Residential)	12	1.56
	5.25			**12**	**63.12**
Glen Loma R3	22.7				326
R3 Medium Density Residential Totals	27.95				389.12

783-19-010 (4)	0.54	R4	3%	23	**12.42**
808 39 066 (4)	0.15	R4	3%	23	**3.45**
810 23 007 (4)	0.24	R4	3%	23	**5.52**
810 23 001 (4)	0.01	R4	3%	23	**0.23**
810 23 003 (4)	0.03	R4	3%	23	**0.69**
810 23 002 (4)	0.04	R4	3%	23	**0.92**
	1.01			23	23.23
Glen Loma R4	17.1				322
TOTAL R4 Multi Family Residential	18.11				345.23

Rural Residential Totals					
810 23 005	27.68	A1	(Agriculture)	0.4	11.07

APN	Acreage (Gross)	Real Acreage (Net)		Zoning		Density	Units	G
Country Estates								
783 64 024	0.49	0.37	Hillside Residential	RH	(Residential Hillside	2.25		
783 64 022	0.41	0.31	Hillside Residential	RH	(Residential Hillside	2.25		
783 64 021	0.53	0.40	Hillside Residential	RH	(Residential Hillside	2.25		
783 64 027	0.69	0.52	Hillside Residential	RH	(Residential Hillside	2.25		
783 64 028	0.50	0.38	Hillside Residential	RH	(Residential Hillside	2.25		
783 64 001	0.70	0.53	Hillside Residential	RH	(Residential Hillside	2.25		
783 64 029	0.69	0.51	Hillside Residential	RH	(Residential Hillside	2.25		
783 64 032	0.79	0.59	Hillside Residential	RH	(Residential Hillside	2.25		
783 65 017	0.53	0.40	Hillside Residential	RH	(Residential Hillside	2.25		
783 65 024	0.78	0.59	Hillside Residential	RH	(Residential Hillside	2.25		
783 65 021	0.93	0.70	Hillside Residential	RH	(Residential Hillside	2.25		
783 65 027	0.94	0.71	Hillside Residential	RH	(Residential Hillside	2.25		
783 65 010	0.52	0.39	Hillside Residential	RH	(Residential Hillside	2.25		
Various Parcel								
783 20 035 (2)	54.39	40.792	Hillside Residential	RH	(Residential Hillside)	2.25		
		47.16					**106.11**	
Low Density Totals								
783-20-035 (3)	16.33	12.25	Low Density Residential	R1	(Single Family Residential)	5.125		
799 33 047	3.23	2.42	Low Density	R1	(Single Family Residential)	5.125		
799 33 045	4.20	3.15	Low Density	R1	(Single Family Residential)	5.125		
783 20 049	3.73	2.80	Low Density	R1	(Single Family Residential)	5.125		
783 20 051	0.84	0.63	Low Density	R1	(Single Family Residential)	5.125		
790 17 003	1.00	0.75	Low Density	R1	(Single Family Residential)	5.125		
790 17 002	2.54	1.90	Low Density	R3	(Medium Density Residential	5.125		
841 07 045	0.17	0.13	Low Density	R1	(Single Family Residential)	5.125		
		24.02					**123.1**	
Neighborhood District Totals								
808 39 066	6.70	5.03	Neighborhood District	Not Zoned		9.25		
810 23 007	10.84	8.13	Neighborhood District	A1	(Agriculture)	9.25		
810 23 001	0.35	0.26	Neighborhood District	A1	(Agriculture)	9.25		
810 23 003	1.18	0.89	Neighborhood District	A1	(Agriculture)	9.25		
810 23 002	1.72	1.29	Neighborhood District	A1	(Agriculture)	9.25		
810 28 022	15.83	11.88	Neighborhood District	R1	(Single Family Residential)	9.25		
783 20 999	20.55	15.41	Neighborhood District	R1	(Single Family Residential)	9.25		
783 20 035 (1)	29.29	21.90	Neighborhood District	R1	(Single Family Residential)	9.25		
783 19 010	24.00	18.00	Neighborhood District	A1	(Agriculture)	9.25		
790 06 029	6.89	5.17	Neighborhood District	R1	(Single Family Residential)	9.25		
790 06 033	3.00	2.25	Neighborhood District	R1	(Single Family Residential)	9.25		
790 06 030	9.83	7.37	Neighborhood District	R1	(Single Family Residential)	9.25		
790 06 032	5.83	4.37	Neighborhood District	R1		9.25		
		101.94					**942.9**	
Rural Residential Totals								
810 23 005	36.90	**27.68**	Rural Residential	A1	(Agriculture)	0.4	**11.07**	
Hecker Pass	**145**						**530**	

Glen Loma 178.9 6 1,641
3354

497.02

TOTAL ACRES=497
UNITS=3354.1

Appendix D

LESA Worksheet

Land Evaluation Worksheet-Site – 1

Land Capability Classification (LCC) and Storie Index Scores

A	B	C	D	E	F	G	H
Soil Map Unit	Project Acres	Proportion of Project Area	LCC	LCC Rating	LCC Score	Storie Index	Storie Index Score
YaA	27.7	1.0	I-1	100	100	100	100
Totals		(Must Sum to 1.0)		***LCC Total Score***	100	***Storie Index Total Score***	100

Site Assessment Worksheet 1.

Project Size Score

	I	J	K
	LCC Class I - II	LCC Class III	LCC Class IV - VIII
	50		
Total Acres	27.7		
Project Size Scores	50		

Highest Project Size Score [ ]

Site Assessment Worksheet 2. - Water Resources Availability

A	B	C	D	E
Project Portion	Water Source	Proportion of Project Area	Water Availability Score	Weighted Availability Score (C x D)
1	Ground water	1	100	100
2				
3				
4				
5				
6				
		(Must Sum to 1.0)	***Total Water Resource Score***	100

Site Assessment Worksheet 3.
Surrounding Agricultural Land and Surrounding Protected Resource Land

A	B	C	D	E	F	G
Zone of Influence						
Total Acres	Acres in Agriculture	Acres of Protected Resource Land	Percent in Agriculture (A/B)	Percent Protected Resource Land (A/C)	Surrounding Agricultural Land Score (From Table)	Surrounding Protected Resource Land Score (From Table)
308	58.3	32.9	18.9	10.6	0	0

- Zone of influence: land within one quarter mile (1320 ft) of the project site.
- Percentage of land in agricultural use estimated using aerial photographs and site investigations.

NOTES

Final LESA Score Sheet

Calculation of the Final LESA Score:

(1) Multiply each factor score by the factor weight to determine the weighted score and enter in Weighted Factor Scores column.
(2) Sum the weighted factor scores for the LE factors to determine the total LE score for the project.
(3) Sum the weighted factor scores for the SA factors to determine the total SA score for the project.
(4) Sum the total LE and SA scores to determine the Final LESA Score for the project.

	Factor Scores	Factor Weight	Weighted Factor Scores
LE Factors			
Land Capability Classification	<1> 100	0.25	25
Storie Index	<2> 100	0.25	25
LE Subtotal		***0.50***	50
SA Factors			
Project Size	<3> 50	0.15	7.5
Water Resource Availability	<4> 100	0.15	15
Surrounding Agricultural Land	<5> 0	0.15	0
Protected Resource Land	<6>0	0.05	0
SA Subtotal		***0.50***	22.5
		Final LESA Score	72.5

For further information on the scoring thresholds under the California Agricultural LESA Model, consult Section 4 of the Instruction Manual.

Appendix E

URBEMIS 7G Results

URBEMIS 2002 For Windows 7.5.0

File Name: I:\ENV Projects\400 Series\ENV-430 (Barberi USA SEIR)\newurbemis\Urbemis 7_15_05 Barberi.u
Project Name: machado02
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Summer)

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	33.42	34.27	354.17	0.22	33.54
TOTALS (lbs/day, mitigated)	32.26	32.95	340.56	0.21	32.25

URBEMIS 2002 For Windows 7.5.0

File Name: I:\ENV Projects\400 Series\ENV-430 (Barberi USA SEIR)\newurbemis\Urbemis 7_15_05 Barberi.u
Project Name: machado02
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
(Pounds/Day - Winter)

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day,unmitigated)	38.92	51.42	408.20	0.20	33.54
TOTALS (lbs/day, mitigated)	37.42	49.45	392.52	0.19	32.25

URBEMIS 2002 For Windows 7.5.0

File Name: I:\ENV Projects\400 Series\ENV-430 (Barberi USA SEIR)\newurbemis\Urbemis 7_15_05 Barberi.u
Project Name: machado02
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Winter)

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	21.41	31.09	237.48	0.12	21.10
Condo/townhouse general	3.28	4.76	36.35	0.02	3.23
Strip mall	14.24	15.57	134.37	0.05	9.21
TOTAL EMISSIONS (lbs/day)	38.92	51.42	408.20	0.20	33.54

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 40 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
Single family housing	9.80 trips / dwelling units	220.00	2,156.00
Condo/townhouse general	11.00 trips / dwelling units	30.00	330.00
Strip mall	123.78 trips / 1000 sq. ft.	18.00	2,228.04

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0	5.0
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0	10.0
Trip Speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Diverted Trip % for Strip mall changed from 40 to 30
The Pass-By Trip % for Strip mall changed from 15 to 25

Changes made to the default values for Operations

The operational emission year changed from 2004 to 2008.
The double counting internal work trip limit changed from to 44.5608.
The double counting shopping trip limit changed from to 22.2804.
The double counting other trip limit changed from to 1280.29.
The travel mode environment settings changed from both to: both
The default/nodefault travel setting changed from nodefault to: nodefault
 Side Walks/Paths: No Sidewalks
      changed to: Side Walks/Paths: Most Destinations Covered
Street Trees Provide Shade: No Coverage
      changed to:Street Trees Provide Shade: Some Coverage
Pedestrian Circulation Access: No Destinations
      changed to:Pedestrian Circulation Access: Some Destinations
Visually Interesting Uses: No Uses Within Walking Distance
      changed to:Visually Interesting Uses: Some Uses within Walking Distance
 Street System Enhances Safety: No Streets
      changed to: Street System Enhances Safety: Few Streets
Pedestrian Safety from Crime: No Degree of Safety
      changed to:Pedestrian Safety from Crime: Some Degree of Safety
Visually Interesting Walking Routes: No Visual Interest
      changed to:Visually Interesting Walking Routes: Minor Level
 Transit Service: Dial-A-Ride or No Transit Service
      changed to: Transit Service: 31-60 Minute Bus within 1/4 Mile
 Interconnected Bikeways: No Bikeway Coverage
      changed to: Interconnected Bikeways: Low Coverage
Bike Routes Provide Paved Shoulders: No Routes
      changed to:Bike Routes Provide Paved Shoulders: Some Routes
Safe Vehicle Speed Limits: No Routes Provided
      changed to:Safe Vehicle Speed Limits: Some Destinations
Mitigation measure Mixed Use Project (Residential Oriented):3
     has been changed from off to on.
Mitigation measure Provide Sidewalks and/or Pedestrian Paths:1
     has been changed from off to on.
Mitigation measure Provide Street Lighting:0.5
     has been changed from off to on.
Mitigation measure Provide Pedestrian Signalization and Signage:0.5
     has been changed from off to on.
Mitigation measure Minor Services Provided:1
     has been changed from off to on.
Mitigation measuremitop5: Park and Ride Lots
     has been changed from on to off.

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Project Name: machado02
Project Location: San Francisco Bay Area
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Pounds/Day - Summer)

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Single family housing	19.57	20.61	216.15	0.14	21.10
Condo/townhouse general	2.95	3.15	33.08	0.02	3.23
Strip mall	10.89	10.51	104.94	0.06	9.21
TOTAL EMISSIONS (lbs/day)	33.42	34.27	354.17	0.22	33.54

Includes correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Trip Rate	Size	Total Trips
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Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
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Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.8	4.6	6.1	11.8	5.0	5.0
Rural Trip Length (miles)	15.0	10.0	10.0	15.0	10.0	10.0
Trip Speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	27.3	21.2	51.5			
% of Trips - Commercial (by land use)						
Strip mall				2.0	1.0	97.0

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     has been changed from off to on.
Mitigation measure Minor Services Provided:1
     has been changed from off to on.
Mitigation measuremitop5: Park and Ride Lots
     has been changed from on to off.

Appendix F

Noise Study

EDWARD L. PACK ASSOCIATES, INC.

1975 HAMILTON AVENUE
SUITE 26
SAN JOSE, CA 95125

Acoustical Consultants

TEL: 408-371-1195
FAX: 408-371-1196
www.packassociates.com

NOISE ASSESSMENT STUDY
FOR THE PLANNED
BARBERI USA ENVIRONMENTAL IMPACT REPORT AMENDMENT
WEST LUCHESSA AVENUE

CITY OF GILROY

Prepared for
EMC Planning Group, Inc.

RECEIVED

JUL 2 2 2005

EMC PLANNING GROUP INC.

Prepared by
Jeffrey K. Pack

July 21, 2005
Project No. 37-021

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EXECUTIVE SUMMARY

This report presents the results of a noise assessment study for an amendment to the Barberi USA Environmental Impact Report for a planned residential development along West Luchessa Avenue and Monterey Road in Gilroy. This study includes background information on acoustics, noise standards applicable to the projects, existing noise exposures, project-generated noise impacts and future noise impacts to the project, project construction noise and general mitigation measures for noise impacted receptor locations. The results of this study reveal that the noise exposures at the site are in excess of the City of Gilroy Noise Element standards from traffic sources on West Luchessa Avenue and Monterey Road. Noise exposure excesses are also like to occur from activity at the adjacent Gilroy Sports Park that is presently under construction. If multi-family housing is developed on the site, these units may also be exposed to noise in excess of the State of California Code of Regulations, Title 24 criterion and standards.

The project will not generate traffic that will increase the noise exposure along Monterey Road. The noise exposures at receptor locations along West Luchessa Avenue will be increased by 1-2 decibels from project traffic.

Under the cumulative traffic scenario, the traffic generated noise exposures will increase by an additional 1 decibel over the project-generated noise exposure increases for West Luchessa Avenue. The cumulative noise exposures will increase the existing noise exposures by 2 dB along Monterey Road and by 2-3 dB along West Luchessa Avenue.

Construction noise may generate temporary noise impacts to existing residences along West Luchessa Avenue and along Monterey Road.

In terms of the CEQA compliance checklist, the project indicates the following:

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Yes, unless mitigated
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	No impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	Yes, unless mitigated
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	Yes, unless mitigated
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No impact
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	No impact

Mitigation measures will be required for the project, depending upon the site plan layout and type of housing planned.

I. Background Information on Acoustics

Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing under near perfect or laboratory conditions.

The decibel scale is logarithmic, similar to the Richter scale for earthquakes, whereby a sound 10 dB higher than another contains 10 times the sound energy. The combining of sound levels is not simply arithmetic addition or subtraction. Decibels are added or subtracted using the equation,

$$\textbf{sum (difference)} = 10\log_{10}(10^{SL/10} \pm 10^{SL/10} \ldots.).$$

The sum of two sound sources of the same level is 3 dB higher than the sound level of one of the sources. For example, 60 dB + 60 dB = 63 dB. The sum of two sound levels that are 10 dB apart is merely the higher of the two levels, that is, the lower level does not add to the higher level. For example, 50 dB + 60 dB = 60 dB.

A sound level that is 10 dB or more below the ambient level will usually not be audible or may be slightly audible, depending upon the range of frequencies of the ambient and the tonal characteristics of the new sound.

Most of the sounds which we hear in our normal environment do not consist of a single frequency, but rather a broad range of frequencies. As humans do not have perfect hearing, environmental sound measuring instruments have an electrical filter built in so that the instrument's detector replicates human hearing. This filter is called the "A-weighting" network which filters down low and very high frequencies.

Noise is defined as unwanted sound. All environmental noise is reported in terms of A-weighted decibels, notated as dBA. All sound levels used in this report are A-weighted unless otherwise noted. Table I provides the typical human response and noise sources for A-weighted noise levels.

Although the A-weighted noise level may adequately indicate the level of environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a mixture of noise from distant sources which create a relatively steady background noise in which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors, L_1, L_{10}, L_{50} and L_{90} are commonly used. They are the A-weighted noise levels exceeded during 1%, 10%, 50% and 90% of a stated time period. The continuous equivalent-energy level (L_{eq}) is that level of a steady state noise which has the same sound energy as a time varying noise and is often considered the average noise level over a given time period. The noise measurements and data in the report of the "L" exceedance values are over 1 hour periods.

TABLE I

The dBA Scale, Human Response and Common Sources

Noise Level, dBA	Human Response	Noise Source	Sound Level
120-150+	Painfully Loud	Sonic Boom	140 dBA
100-120	Physical Discomfort	Fast Motorcycle at 20 ft.	110 dBA
		Train Horn at 50 ft.	104 dBA
		Chain Saw at 25 ft.	100 dBA
70-100	Annoying	Discotheque	98 dBA
		Diesel Pump at 100 ft.	95 dBA
		Rail Crossing Bells	94 dBA
		Jet Aircraft at 1000 ft.	85 dBA
		Freeway at 100 ft.	80 dBA
50-70	Intrusive	Average Traffic at 100 ft.	70 dBA
		Vacuum Cleaner	70 dBA
		Typewriter	65 dBA
		Television	53 dBA
0-50	Quiet	Normal Conversation	50 dBA
		Light Traffic at 100 ft.	45 dBA
		Refrigerator	43 dBA
		Desktop Computer	38 dBA
		Whispering	35 dBA
		Threshold of Hearing	0 dBA

In determining the daily level of environmental noise, it is important to account for the difference in response of people to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. However, most household noise also decreases at night and exterior noise becomes more noticeable. Furthermore, most people sleep at night and are sensitive to noise intrusion. To account for human sensitivity to nighttime noise, the Day-Night Level (DNL), often notated as L_{dn}, noise descriptor was developed. The DNL divides the 24-hour day into the daytime period of 7:00 a.m. to 10:00 p.m. and the nighttime period of 10:00 p.m. to 7:00 a.m. The nighttime noise levels are penalized by 10 dB to account for the greater sensitivity to noise at night. The Community Noise Equivalent Level (CNEL) is another 24-hour average noise descriptor which includes 5 dB evening (7:00 p.m. - 10:00 p.m.) and 10 dB nighttime penalties. The DNL and CNEL are typically numerically equivalent.

Sound from stationary noise sources attenuate at a rate of $20\log_{10}(r_1/r_2)$, where, r_1 is the measurement distance and r_2 is the distance to the receptor. This equates to a 6 dB reduction for every doubling of the distance and is accurate for conditions where the distances are within approximately 1,000 ft. and the intervening ground surface is flat and somewhat porous, such as a vacant field. Sound from moving traffic (moving point source) attenuates at the rate of approximately $15\log10(r_1/r_2)$ or 4.5 dB per doubling of the distance. Rail noise attenuates at 4.5 - 6 dB per doubling of the distance.

Since sound is merely a fluctuation of air pressure, a sound barrier must be an air tight structure. Solid walls, earthen berms or topography are the most common sound barriers. Vegetation does little for blocking sound unless the vegetation is a thick forest of high density planting a minimum of 100 ft. thick. Over great distances, heavy vegetation can cause excess scattering of sound waves, which reduces sound slightly more than the normal attenuation rate.

Sound reduction provided by a barrier, whether the barrier is natural or man made, is calculated using Fresnel diffraction equations, which calculate the amount of reduction of sound due to the diffraction, or bending, of sound over or around a barrier. Low frequency sound has long wavelengths, therefore, it bends around barriers rather easily. High frequency sound has short wavelengths and cannot bend around a solid material as easily. Light, for instance, contains extremely short wavelengths, thus, we cannot see around a corner but we can hear sounds from around a corner. The amount of sound reduction from a barrier is a function, not only of the frequency of the sound, but of the difference in the length of the direct (unshielded) sound path and the length of the sound path traveling over or around the barrier.

The Fresnel Diffraction equation used to calculate the amount of sound reduction, termed Insertion Loss, provided by a barrier is:

Insertion Loss = $10\log_{10}(3+10(2f/v)/d)$, where,

f = frequency of sound (Hz)
v = speed of sound in air (1,128 ft./sec.)
d = sound path length differential (ft.)

The sound path difference is usually determined using Pythagorean calculations as the distances from the source, to the top of the barrier and to the receiver locations can be described by the hypotenuses of the three triangles formed by this geometry.

The perceptibility of the difference in sound levels is categorized by the following relationships.

< 3 dB = imperceptible outside of carefully controlled conditions.
3 dB = just perceptible.
5-6 dB = very noticeable (approx. 25% reduction in loudness).
10 dB = half or doubling of loudness, a very significant change.

II. Standards and Descriptions

A. Noise Standards

The noise exposures at the project sites were evaluated against the standards of the City of Gilroy General Plan Noise Element, Ref. (a), which utilizes the DNL and specifies an exterior noise exposure limit of 60 dB DNL for residential exterior areas. The Noise Element limits the interior noise exposures to 45 dB DNL or less.

In addition to the standards imposed by City policy, the project was also evaluated against the standards of the State of California Code of Regulations, Title 24, Ref. (b), which utilizes the DNL noise descriptor and is applicable only to new multi-family housing. When the exterior noise exposure exceeds 60 dB DNL, an acoustical analysis is required to limit the interior noise exposures to 45 dB DNL or less.

The project-generated noise exposure increases were evaluated against the guidelines of the California Environmental Quality Act (CEQA). CEQA does not limit noise levels or noise exposures nor does it quantify noise exposure or noise level increases over the ambient to define noise impacts. CEQA evaluates a project as a significant noise impact if it "...caused a substantial increases in the ambient noise levels...". The quantification of the threshold of significance is left up to the local jurisdiction. The City of Gilroy, however, does not provide a threshold of significance in the General Plan. Therefore, for the purposes of this study, thresholds of significance used by many other local jurisdictions are recommended for adoption for this project. These thresholds are:

(a) causing the DNL in existing residential areas to increase by 5 dB or more and remain below 60 dB DNL;

(b) causing the DNL in existing residential areas to increase by 3 dB or more, thereby exceeding 60 dB DNL;

(c) causing the DNL in existing residential areas to increase by 1 dB or more if the current noise exposure exceeds 60 dB DNL.

If the project causes any of the above three criteria to occur, the project will be considered a significant noise impact to the areas where it occurs and mitigation measures will be required.

B. Area Description

The proposed project study area is in the southwestern area of the City of Gilroy. The site is bordered by West Luchessa Avenue to the north, Monterey Road to the east, Uvas Creek to the west and the Gilroy Sports Park to the south. Single-family residences are across West Luchessa Avenue to the north. There is a 6 ft. high noise control barrier along the existing residences' property contiguous with West Luchessa Avenue. A Suburban Propane facility is located on the site on the corner of Monterey Road and West Luchessa Avenue. A single-family home is also located on the site along Monterey Road. The site is relatively flat and at-grade with the roadways.

C. Project Description

There is no detailed project plan at this time.

III. Noise Impacts

A. Exterior Noise Impacts to the Project

The noise exposure impacts to the site described below are without the application of mitigation measures and represent the noise environments for existing site conditions.

Monterey Road

- The existing exterior noise exposure at the property boundary estimated to be 75 ft. from the centerline of Monterey Road is 70 dB DNL. Under future cumulative traffic conditions, the noise exposure is expected to increase to 72 dB DNL.

- The future 70 dB DNL noise contour will be 95 ft. from the centerline of the road.
- The future 65 dB DNL noise contour will be 220 ft. from the centerline of the road.
- The future 60 dB DNL noise contour will be 470 ft. from the centerline of the road.
- Residences constructed within 470 ft. of the centerline of Monterey Road will be exposed to noise in excess of the standards of the City of Gilroy Noise Element and the Title 24 criterion if the dwellings are multi-family.

West Luchessa Avenue

- The existing exterior noise exposure at the property boundary estimated to be 40 ft. from the centerline of Monterey Road is 69 dB DNL. Under future cumulative traffic conditions, the noise exposure is expected to increase to 72 dB DNL.
- The future 70 dB DNL noise contour will be 48 ft. from the centerline of the road.
- The future 65 dB DNL noise contour will be 110 ft. from the centerline of the road.
- The future 60 dB DNL noise contour will be 235 ft. from the centerline of the road.
- Residences constructed within 235 ft. of the centerline of West Luchessa Avenue will be exposed to noise in excess of the standards of the City of Gilroy Noise Element and the Title 24 criterion if the dwellings are multi-family.

Gilroy Sports Park

- The ball fields at the Gilroy Sports Park are expected to generate a noise exposure up to 63 dB DNL at the most impacted property line of the project site.
- The 60 dB DNL noise contour will be 175 ft. from the Sports Park property line.
- Residences constructed within 175 ft. of the south property line of the site will be exposed to noise in excess of the standards of the City of Gilroy Noise Element and the Title 24 criterion if the dwellings are multi-family.

As shown above, the exterior noise exposures at the site exceed the limits of the City of Gilroy Noise Element standards by up to 12 dB along Monterey Road and West Luchessa Avenue.

If multi-family dwellings are located within the 60 dB DNL noise contours, an acoustical analysis will be required by the State Building Code. This study does not satisfy that requirement.

B. Interior Noise Impacts to the Project

Interior noise exposure impacts cannot be precisely determined without detailed knowledge of the building construction and locations of the buildings. Generally, a building shell that does not contain noise control items will reduce noise by 15 dB. Therefore, any dwellings constructed within the 60 dB DNL noise contours will have interior noise exposures in excess of the standards of the City of Gilroy Noise Element and Title 24 (if multi-family).

C. Description of Noise Measurement Methodology and Evaluations

To evaluate the on-site noise exposures against the City of Gilroy standards and the Title 24 criterion, the DNL's for the survey locations were calculated by decibel averaging of the L_{eq}'s as they apply to the daily time periods of the DNL index. A ten decibel penalty was added to noise created in the nighttime period to account for the increased human sensitivity to noise during these hours. The DNL is a 24-hour noise descriptor that uses the measured L_{eq} values to calculate a 24-hour time-weighted average noise exposure. Adjustments were made to the measured traffic noise levels to account for the various setback distances from the measurement locations to various receptor or analysis locations using methods established by the Highway Research Board, Ref. (c). The formula used to calculate the DNL is described in Appendix B.

The results of the calculations indicate that the exterior noise exposure at the measurement location 75 ft. from the centerline of Monterey Road was calculated to be 70 dB DNL. Under future cumulative traffic conditions, the noise exposure is expected to increase to 72 dB DNL. Thus, the noise exposure at the site along Monterey Road will be up to 12 dB in excess of the City of Gilroy Noise Element standards and the Title 24 criterion.

The noise exposure measured at 30 ft. from the centerline of West Luchessa Avenue and 14 ft. above the ground was calculated to be 72 dB DNL. Because of the extreme angle of the measuring microphone to the road surface, the higher elevation of the microphone causes a 1 decibel increase in the noise levels compared to noise levels that would have been measured at 5 ft. above the ground (standard methodology). The sound measuring instrument was placed at the high elevation for security of the instrument. At ground level, the noise exposure is 71 dB DNL.

At a distance of 40 ft. from the centerline of the road, the existing noise exposure is 69 dB DNL. This location corresponds to the property line of the existing residences on the north side of West Luchessa Avenue. We are assuming that the property line of the subject site will also be 40 ft. from the centerline of the road. Under future cumulative traffic conditions, the noise exposure is expected to increase to 72 dB DNL at 40 ft. from the centerline. The noise exposures will be up to 12 dB in excess of the City of Gilroy Noise Element standards and the Title 24 criterion.

Noise exposure impacts to the project from the Gilroy Sports Park were determined from the noise assessment study prepared for the sports park, Ref. (d).

D. Project-Generated Noise Impacts

As the project planned for the site is residential, project-generated noise is limited to project traffic generation and its impact on the existing residences in the area. To increase the traffic-generated noise exposure by 1 decibel, there must be at least a 15% increase in the 24-hour traffic volume, assuming other factors pertaining to traffic noise remain unchanged. These factors include road surface and average vehicle speed.

Table II, below, shows the Existing, Project Trip, Background and Cumulative traffic volumes in terms of am peak hour, pm peak hour and the Average Daily Traffic (ADT), as provided by the project traffic consultant, Ref. (e), and the change in the noise exposures at the site and at existing residences along Luchessa Avenue. The table provides the increase in the existing noise environments due to the project, due to approved growth in the area (Background) without the project and due to projected growth in the area including the Project (Cumulative).

For the project to generate a significant noise impact, the project noise contribution (ΔdB) must be +5 dB or greater if the existing noise exposure in lower than 60 dB DNL and will remain below 60 dB DNL. If the existing noise exposure is below 60 dB DNL and the project causes the noise exposure to exceed 60 dB DNL, then a significant noise impact occurs. If the existing noise exposure is 60 dB DNL or greater, then a +1 dB or greater increase in the noise environment due to the project is considered a significant noise impact.

TABLE II

Existing, Project and Buildout Traffic Volumes

	am peak	pm peak	ADT	ΔdB
Monterey Road.				
Existing	1,066	1,267	12,670	--
Project Trips	102	139	1,390	+0
Background	1,189	1,518	15,180	+1
Cumulative	1,337	1,903	19,030	+2
West Luchessa Avenue				
Existing	690	682	6,900	--
Project Trips	184	302	3,020	+2
Background	784	872	8,720	+1
Cumulative	1,105	1,458	14,580	+3
West Luchessa Avenue (near Princeville)				
Existing	703	622	7,030	--
Project Trips	48	98	980	+1
Background	786	753	7,860	+0
Cumulative	970	1,083	10,830	+2

As shown above, project traffic will not increase the noise environment along Monterey Road. However, the project will cause a 1-2 decibel increase along West Luchessa Avenue. As the existing noise exposures in the rear yards of the existing homes along West Luchessa are 59-61 dB DNL, the project will result is noise exposures exceeding the standards of the City of Gilroy Noise Element. This is a ***significant impact***.

The background traffic volumes (without the project) will increase the noise exposures at the existing homes along West Luchessa Avenue by 0-1 decibels and the result will be noise exposures in excess of the City of Gilroy Noise Element standards.

Under Cumulative traffic conditions, the noise exposures in the rear yards of the homes along West Luchessa Avenue will increase by 2-3 decibels with the project and 1-2 decibels without the project.

Under both scenarios of "with the project" or "without the project", the noise exposures in the rear yards of the homes along West Luchessa Avenue will exceed the standards of the City of Gilroy Noise Element. The project will be responsible for approximately 1/2 of the noise increase.

Mitigation measures will be required to resolve the project-generated noise impacts.

E. Construction Noise Impacts

Short-term construction impacts may also be created during construction of the developments. Construction equipment generates noise levels in the range of 75 to 95 dBA at a 30 ft. distance from the source and has the potential for disturbing surrounding residential land uses when equipment is operating in their vicinity.

Noise from construction equipment dissipates at the rate of 6 dB per doubling of the distance from the source to the receiver. At receptor locations approximately 80 ft. from the site, construction noise will be in the range of 66 to 86 dBA. Since construction is carried out in several reasonably discrete phases, each has its own mix of equipment and consequently, its own noise characteristics. Generally, the site preparation requires the use of heavy equipment such as bulldozers, loaders, scrapers, and diesel trucks. Upon completion of the project, the area's sound levels will reduce essentially to the predicted traffic noise exposures analyzed in this study.

Although construction noise is considered a temporary noise impact and is generally not significant in terms of long term noise exposure, it has a potential for disturbing nearby residences. Therefore, general mitigation measures are recommended to minimize annoyance to the neighbors. The recommended measures are described in Section IV, below.

IV. Mitigation Measures

A. Noise Impacts to the Project

Exterior Noise Control

The exterior noise environment is mitigated through the use of sound barriers, which includes fences, walls, berms or any other solid, air-tight material, increased setbacks of noise sensitive spaces, such as rear yards and patios, and control of the noise source, such as reducing vehicle speed or smoothing a rough road.

As the project has not be defined in detail, precise mitigation measures cannot be designed. However, if rear yards back up to Monterey Road, noise control barriers up to 13 ft. high would could be necessary to reduce the Monterey Road traffic noise exposures to acceptable levels.

If rear yards back up to West Luchessa Avenue, noise control barriers up to 9 ft. high would be necessary to reduce West Luchessa Avenue traffic noise exposures to acceptable levels.

Homes along the south property line of the site are also expected to be noise impacted by the ballfields at the adjacent Gilroy Sports Park. Previous studies of the sports park revealed that a 6 ft. high noise control barrier will be necessary if homes back up to the property line common with the park.

Interior Noise Control

The interior noise environment in a home is a function of the exterior noise exposure at the building setback minus the sound attenuation provided by the buildings shell. Standard building shells reduce noise by 15 decibels assuming that windows are single-pane, single-strength glass and windows are kept open up to 50% of the time for natural ventilation.

The interior noise exposures at the first floors are reduced by the use of noise control barriers, as described above and the use of sound control windows. The interior noise exposures at the second floors are reduced by the use of sound control windows. The property line barriers usually do not affect the second floor.

The sound rating for windows in living spaces setback approximately 20 ft. from the Monterey Road property line would need to be Sound Transmission Class (STC) 30.

The sound rating for windows in living spaces setback approximately 20 ft. from the West Luchessa Avenue property line would need to be Sound Transmission Class (STC) 29. Windows behind noise control barriers do not need to be controlled.

Living spaces closest to the Gilroy Sports Park would need to be rated minimum STC 23.

Mitigation Measure

- Perform a detailed noise assessment study of the project once a site plan is developed. The study shall include descriptions of the exterior and interior noise exposures under existing and future conditions and the mitigation measures necessary to achieve compliance with the City of Gilroy Noise Element and the State of California Code of Regulations, Title 24 (as applied to multi-family housing).

B. Project-Generated Impacts

As both the project and expected growth in the area without the project are each expected to cause a slight (not or just perceptible) increases in the noise exposures at the existing homes along West Luchessa Avenue, the existing noise control barrier along West Luchessa Avenue should be modified or replaced to achieve an additional 3 decibels of West Luchessa Avenue traffic noise reduction for compliance with the 60 dB DNL standard of the City of Gilroy Noise Element under the Cumulative buildout scenario.

Mitigation Measure

- To achieve a 3 dB additional reduction of traffic noise, the noise control barrier along West Luchessa Avenue shall be a minimum of 9 ft. high, with the barrier height in reference to the nearest building pad elevation.

- The existing soundwall should be reviewed to determine if a 3 ft. high extension could be added to the existing barrier. If not, the barrier should be replaced with a new barrier 9 ft. high in reference to the nearest building pad elevation. Note that approximately half of the noise increase is due to project traffic and half of the noise increase is due to normal expected growth in the area without the project.

C. Construction Noise Mitigation

Mitigation of the construction phase noise at the site can be accomplished by using quiet or "new technology" equipment. The greatest potential for noise abatement of current equipment should be the quieting of exhaust noises by use of improved mufflers. It is recommended that all internal combustion engines used at the project site be equipped with a type of muffler recommended by the vehicle manufacturer. In addition, all equipment should be in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train and other components. Construction noise can also be mitigated by the following:

- Scheduling noisy operations for the daytime hours of 7:00 a.m. to 5:00 p.m. Monday through Friday.

- All diesel powered equipment should be located more than 200 ft. from any residence if the equipment is to operate for more than several hours per day.

- Dirt berming and stockpiling materials can also help reduce noise to sensitive receptor locations.

As noise reduction benefit can also be achieved by appropriate selection of equipment utilized for various operations, subject to equipment availability and cost considerations, the following recommendations for minimizing impacts on the surrounding area are offered:

Earth Removal: Use scrapers as much as possible for earth removal, rather than the noisier loaders and hauling trucks.

Backfilling: Use a backhoe for backfilling, as it is less costly and quieter than either dozers or loaders.

Ground Preparation: Use a motor grader rather than a bulldozer for final grading.

Building Construction: Powers saws should be shielded or enclosed where practical to decrease noise emissions. Nail guns should be used where possible as they are less noisy than manual hammering.

V. Conclusions

In conclusion, the project will be noise impacted by traffic on Monterey Road and West Luchessa Avenue, depending upon final site layouts, setbacks and building types. The project will also cause slight but significant increases in the noise environment of existing homes along West Luchessa Avenue as will normal growth in the area without the project. Construction noise will be significant for portions of the construction process, but will be temporary. Mitigation measures to reduce noise impacts to the project, from the project and from construction are provided herein.

This report presents the results of a noise assessment study for the Environmental Impact Report for the Barberi Urban Service Area along West Luchessa Avenue in Gilroy. The study findings for existing conditions are based on field measurements and other data and are correct to the best of our knowledge. Future noise projections are based on information provided by the consulting traffic engineer. Significant deviations in the predicted traffic volumes, vehicles speeds, site layout or planning, motor vehicle technology, noise regulations or other future changes beyond our control may produce long-range noise results different from our estimates.

Report Prepared By:

Jeffrey K. Pack
President

APPENDIX A

References

(a) City of Gilroy General Plan, updated 1993

(b) State of California Code of Regulations, Title 24, "Sound Transmission Control", Revised 1989

(c) Highway Research Board, "Highway Noise - A Design Guide for Highway Engineers", Report 117, 1971

(d) "Noise Assessment Study for the Environmental Impact Report, Gilroy Sports Park, Monterey Frontage Road, Gilroy", by Edward L. Pack Associates, Inc., Project No. 30-081, November 18, 1998

(e) Information on Existing, Project and Cumulative Traffic Volumes Provided by Ms. Amy Ware, Fehr & Peers Transportation Consultants, June 24, 2005

APPENDIX B

Noise Standards, Terminology, Instrumentation,

1. Noise Standards

A. City of Gilroy Noise Element Standards

The Noise Section of the City of Gilroy General Plan, Chapter 26, specifies the following permissible maximum limits:

Land Use Category	Max. Outdoor DNL (L_{dn})	Max. Indoor DNL (L_{dn})
Residential	60[1]	45
Commercial	65	61
Industrial	76	65 dBA L_{10}, 60 dBA L_{50}

[1] - The outdoor sound levels for residential properties shall be measured from a location that is no less than:

- 15 feet outside the rear-most proposed household wall;
- 20 feet outside the front-most proposed household wall;
- 6 feet outside the side-most proposed household wall; and
- 10 feet outside the side-most proposed household wall when adjacent to a street

Residential interior living spaces are limited to 45 dB DNL.

B. Title 24 Noise Standards

The California Code of Regulations, "Sound Transmission Control", Title 24, Part II, applies to all new multi-family dwellings including condominiums, townhouses, apartments, hotels and motels. The standards, which utilize the Day-Night Level (DNL) descriptor, establish an exterior reference or criterion level of 60 dB DNL, and specify that multi-family buildings to be located within an annual DNL zone of 60 dB or greater require an acoustical analysis. The analysis report must show that the planned buildings provide adequate attenuation to limit intruding noise from exterior sources to an annual DNL of 45 dB or less in any habitable space. The Community Noise Equivalent Level (DNL) descriptor, which is similar to the DNL, may also be used, as the DNL and DNL are considered to be equivalent.

The Title 24 standards also establish minimum sound insulation requirements for interior partitions separating different dwelling units from each other and dwelling units from common spaces such as garages, corridors, equipment rooms, etc. The common interior walls and floor/ceiling assemblies must achieve a minimum Sound Transmission Class (STC) rating of 50 for airborne noise. Common floor/ceiling assemblies must achieve an Impact Insulation Class (IIC) rating of 50 for impact noise. These ratings are based on laboratory tested partitions. Field tested partitions must achieve ratings of NIC and FIIC 45.

2. Terminology

A. Statistical Noise Levels

Due to the fluctuating character of urban traffic noise, statistical procedures are needed to provide an adequate description of the environment. A series of statistical descriptors have been developed which represent the noise levels exceeded a given percentage of the time. These descriptors are obtained by direct readout of the Community Noise Analyzer. Some of the statistical levels used to describe community noise are defined as follows:

L_1 - A noise level exceeded for 1% of the time.

L_{10} - A noise level exceeded for 10% of the time, considered to be an "intrusive" level.

L_{50} - The noise level exceeded 50% of the time representing an "average" sound level.

L_{90} - The noise level exceeded 90 % of the time, designated as a "background" noise level.

L_{eq} - The continuous equivalent-energy level is that level of a steady-state noise having the same sound energy as a given time-varying noise. The L_{eq} represents the decibel level of the time-averaged value of sound energy or sound pressure squared and is used to calculate the DNL and DNL.

B. Day-Night Level (DNL)

Noise levels utilized in the standards are described in terms of the Day-Night Level (DNL). The DNL rating is determined by the cumulative noise exposures occurring over a 24-hour day in terms of A-Weighted sound energy. The 24-hour day is divided into two subperiods for the DNL index, i.e., the daytime period from 7:00 a.m. to 10:00 p.m., and the nighttime period from 10:00 p.m. to 7:00 a.m. A 10 dBA weighting factor is applied (added) to the noise levels occurring during the nighttime period to account for the greater sensitivity of people to noise during these hours. The DNL is calculated from the measured L_{eq} in accordance with the following mathematical formula:

$$DNL = [(L_d+10\log_{10}15) \,\&\, (L_n+10+10\log_{10}9)] - 10\log_{10}24$$

Where:

L_d = L_{eq} for the daytime (7:00 a.m. to 10:00 p.m.)
L_n = L_{eq} for the nighttime (10:00 p.m. to 7:00 a.m.)
24 indicates the 24-hour period
& denotes decibel addition.

C. A-Weighted Sound Level

The decibel measure of the sound level utilizing the "A" weighted network of a sound level meter is referred to as "dBA". The "A" weighting is the accepted standard weighting system used when noise is measured and recorded for the purpose of determining total noise levels and conducting statistical analyses of the environment so that the output correlates well with the response of the human ear.

3. Instrumentation

The on-site field measurement data were acquired by the use of one or more of the precision acoustical instruments shown below. The acoustical instrumentation provides a direct readout of the L exceedance statistical levels including the equivalent-energy level (L_{eq}). Input to the meters was provided by a microphone extended to a height of 5 ft. above the ground. The meter conforms to ANSI S1.4 for Type 1 instruments. The "A" weighting network and the "Fast" response setting of the meter were used in conformance with the applicable ISO and IEC standards. All instrumentation was acoustically calibrated before and after field tests to assure accuracy.

Bruel & Kjaer 2231 Precision Integrating Sound Level Meter
Larson Davis LDL 812 Precision Integrating Sound Level Meter
Larson Davis 2900 Real Time Analyzer

APPENDIX C

Noise Measurement Data and Calculation Tables

DNL CALCULATIONS

CLIENT:	EMC PLANNING GROUP, INC.									
FILE:	37-021									
PROJECT:	BARBERI URBAN SERVICE AREA EIR									
DATE:	7/11-12/2005									
SOURCE:	MONTEREY RD., WEST LUCHESSA AVE.									
LOCATION 1	Monterey Rd.					LOCATION 2	W. Luchessa Ave.			
Dist. to Source	75 ft.					Dist. to Source	30 ft.			
TIME	Leq	10^Leq/10				TIME	Leq	10^Leq/10		
7:00a.m.	67.1	5128613.8				7:00a.m.	71.0	12589254.1		
8:00 a.m.	65.5	3548133.9				8:00 a.m.	70.7	11748975.5		
9:00a.m.	66.3	4265795.2				9:00a.m.	70.8	12022644.3		
10:00a.m.	64.4	2754228.7				10:00a.m.	69.7	9332543.0		
11:00 a.m.	65.1	3235936.6				11:00 a.m.	70.5	11220184.5		
12:00noon	65.4	3467368.5				12:00noon	70.7	11748975.5		
1:00p.m.	65.0	3162277.7				1:00p.m.	70.0	10000000.0		
2:00 p.m.	65.5	3548133.9				2:00 p.m.	70.2	10471285.5		
3:00 p.m.	65.6	3630780.5			62.7	3:00 p.m.	70.3	10715193.1		
4:00 p.m.	66.0	3981071.7				4:00 p.m.	71.4	13803842.6		
5:00 p.m.	65.7	3715352.3				5:00 p.m.	71.3	13489628.8		
6:00 p.m.	64.3	2691534.8				6:00 p.m.	69.7	9332543.0		
7:00 p.m.	63.7	2344228.8				7:00 p.m.	69.4	8709635.9		
8:00 p.m.	66.8	4786300.9				8:00 p.m.	67.9	6165950.0		
9:00 p.m.	62.6	1819700.9	SUM=	52079458.2		9:00 p.m.	66.4	4365158.3	SUM=	155715814.4
10:00 p.m.	59.0	794328.2	Ld=	65.4		10:00 p.m.	65.2	3311311.2	Ld=	70.2
11:00 p.m.	59.4	870963.6				11:00 p.m.	65.8	3801894.0		
12:00mdnt	52.8	190546.1				12:00mdnt	59.5	891250.9		
1:00 a.m.	55.9	389045.1				1:00 a.m.	59.0	794328.2		
2:00 a.m.	54.2	263026.8				2:00 a.m.	57.1	512861.4		
3:00 a.m.	55.7	371535.2				3:00 a.m.	56.3	426579.5		
4:00 a.m.	59.5	891250.9				4:00 a.m.	61.2	1318256.7		
5:00 a.m.	63.6	2290867.7				5:00 a.m.	66.0	3981071.7		
6:00 a.m.	70.2	10471285.5	SUM=	16532849.1		6:00 a.m.	70.3	10715193.1	SUM=	25752746.8
			Ln=	62.6					Ln=	64.6
	Daytime Level=	77.2					Daytime Level=	82.0		
	Nighttime Level=	82.1					Nighttime Level=	84.1		
	DNL=	**70**					**DNL=**	**72.4**		
	24-Hour Leq=	64.6					24-Hour Leq=	68.8		

Appendix G

Traffic Report



FEHR & PEERS
TRANSPORTATION CONSULTANTS

Draft Report
Transportation Impact Analysis

Gilroy Urban Service Area

August 2005

Prepared for:
EMC Planning

Prepared by:
Fehr & Peers

Draft Report

Gilroy Urban Service Area
Transportation Impact Analysis

Prepared for:

EMC Planning

Prepared by:

Fehr & Peers

August 19, 2005

SJ05-770

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EXECUTIVE SUMMARY

This report presents the results of the traffic impact analysis (TIA) for the proposed residential and commercial development in Gilroy, California. The proposed project includes 250 residential units (220 single family and 30 apartments units) and 18,000 square feet (s.f.) of commercial uses. At the time of this study, a site plan was not available for review. Based on consultation with City of Gilroy staff, it was assumed that access to the project site will be provided by new streets that will intersect with Luchessa Avenue at Church Street and at Hyde Park Drive.

The impacts of the proposed project to the surrounding transportation system were evaluated following the guidelines of the City of Gilroy, and the Santa Clara Valley Transportation Authority (VTA), which is the congestion management agency for Santa Clara County. The operations of key intersections were evaluated with level of service calculations for Existing, Background, Project, and Cumulative Conditions.

PROJECT TRIP ESTIMATES

The amount of traffic generated by the proposed residential and commercial units was estimated by applying appropriate trip generation rates to each type of proposed land use. Trip generation rates for "Shopping Center" (820), "Single-Family Detached" (210), and "Apartment" (220) land use from the Institute of Transportation Engineers' (ITE) *Trip Generation* (7th Edition) were used to estimate the number of project trips. A reduction of 25 percent was applied to the commercial trips to account for pass-by trips during the peak hours. The proposed commercial uses and residential units combined generate 4,707 daily trips, 223 AM peak-hour trips (72 inbound/151 outbound), and 403 PM peak-hour factor trips (230 inbound/173 outbound).

INTERSECTION OPERATIONS

Table ES-1 presents the level of service results for the study scenarios. The study intersections are projected to operate at LOS D or better through Project Conditions. Therefore, the project impacts at the study intersections would be less than significant. It should be noted that the overall operations of the Monterey Street/Tenth Street intersection are acceptable under Project Conditions. However, it was observed that the permitted phasing for the eastbound and westbound left-turn movements causes excessive delays for left-turning vehicles. Vehicles making these movements were occasionally prevented from making this movement in one signal cycle length due to the heavy opposing through movements. In several cases during the hour, only one vehicle was able to turn during each cycle. This creates a situation where drivers become frustrated and attempt to cross the oncoming traffic without adequate gaps in oncoming traffic. The project is projected to add volume to the westbound left-turn movement during both peak hours. This increase in volume could exacerbate this condition and result in a potentially significant impact.

All of the study intersections are projected to operate at unacceptable levels of service under Cumulative Conditions. This results in a significant cumulative impact.

City staff has discussed the implementation of a roundabout at the Luchessa Avenue/Thomas Road intersection. This improvement would result in LOS A (7.6 seconds of delay) and LOS C (23.7 seconds of delay) under Cumulative Conditions during the AM and PM peak hours, respectively. Signalization of the intersection of Luchessa Avenue and Princevalle Street would result in LOS B+ during both peak hours.

To mitigate cumulative impacts eastbound approach of the Monterey Street and Luchessa Avenue intersection must provide one left-turn lane, two through lanes, and one separate right-turn lane. Implementing this as well as an additional northbound left-turn lane would result in LOS D (48.0 seconds of delay). The additional left-turn lane improvement would require the widening of the west leg to provide two receiving lanes..

TABLE ES-1

INTERSECTION LEVELS OF SERVICE SUMMARY

Intersection and Scenario	Peak Hour	LOS Standard[1]	Intersection Control	Overall Intersection (Worst Movement/Approach		Mitigated Operations	
				Delay[2]	LOS[3]	Delay[2]	LOS[3]
1. Luchessa Street and Thomas Road							
Existing Conditions	AM PM	C	All-way stop	12.6 9.8	B A	NA	NA
Background Conditions	AM PM	C	All-way stop	14.4 11.9	B B	NA	NA
Project Conditions	AM PM	C	All-way stop	15.6 13.3	C B	NA	NA
Cumulative Conditions	AM PM	C	All-way stop	>80 >80	F F	7.6 23.7	A C
2. Luchessa Street and Princevalle Street							
Existing Conditions	AM PM	C(D)	Side-street stop	4.3(16.5) 3.0(13.4)	A(C) A(B)	NA	NA
Background Conditions	AM PM	C(D)	Side-street stop	4.3(18.4) 3.3(15.9)	A(C) A(C)	NA	NA
Project Conditions	AM PM	C(D)	Side-street stop	4.5(20.0) 3.5(18.3)	A(C) A(C)	NA	NA
Cumulative Conditions	AM PM	C(D)	Side-street stop	8.5(63.4) 20.8(>80)	A(F) C(F)	10.2 11.9	B+ B+
3. Luchessa Avenue and Monterey Street							
Existing Conditions	AM PM	D	Signal	23.9 34.0	C C-	NA	NA
Background Conditions	AM PM	D	Signal	24.6 33.4	C D+	NA	NA
Project Conditions	AM PM	D	Signal	26.7 37.8	C D	NA	NA
Cumulative Conditions	AM PM	D	Signal	42.6 >80	D F	NA 48.0	NA D
4. Monterey Street and Tenth Street							
Existing Conditions	AM PM	D	Signal	15.1 19.7	B C+	NA	NA
Background Conditions	AM PM	D	Signal	17.8 28.5	B- C	NA	NA
Project Conditions	AM PM	D	Signal	18.3 29.2	C+ C-	NA	NA
Cumulative Conditions	AM PM	D	Signal	25.7 77.9	C E-	NA 48.6	NA D

Notes:

1 The minimum acceptable overall level of service according to the City of Gilroy standards. The number in parentheses represents the worst case movement/approach.

2 Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. For unsignalized intersections, overall control delay and for the worst movement/approach (presented in parentheses), expressed in seconds per vehicle, is presented. Calculations performed using the 2000 Highway Capacity Manual (HCM) methodology contained in TRAFFIX.

3 LOS = Level of service

The cumulative impact at the Monterey Street/Tenth Street intersection would be mitigated with the implementation of a second southbound left-turn lane, a westbound overlap phase, and providing one left-turn lane, two through lanes, and one separate right-turn lane on the northbound approach. This improvement would result in LOS D (48.6 seconds of delay) during the PM peak hour under Cumulative Conditions.

It should be noted that it is likely that right-of-way would be needed to implement the above cumulative mitigation measures.

FREEWAY SEGMENT ANALYSIS

According to CMP 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 during the AM and PM peak hours to determine if a significant amount of project traffic would be added to these freeway segments.

All segments are operating at an acceptable level of service during both peak hours. The results of the freeway level of service analysis indicate that the proposed project would not have a significant impact on any of the segments of US 101.

SITE ACCESS AND ON-SITE CIRCULATION

No site plan was available for review at the time of this study. Access to the proposed project was assumed to be provided across from Hyde Park Drive and Church Street. The new streets will provide sufficient access the project-generated traffic.

An additional access point on Monterey Street to provide the commercial land use with another ingress/egress location may be able to be accommodated. However, this location would be limited to right-turns only and would have to provide sufficient deceleration distance for vehicles entering at this location. Further engineering studies need to be completed before the feasibility of providing this access point can be determined.

PEDESTRIAN, BICYCLE AND TRANSIT IMPACTS

Existing sidewalks are not provided continuously on the south side of Luchessa Avenue. Sidewalks on Luchessa Avenue along the project's frontage should be provided. The proposed project should improve the pedestrian crosswalks on the southwest corner of the Monterey Street and Luchessa Avenue intersection to increase the safety for pedestrians at this intersection. It is recommended that sidewalks, curbs, and restriping of the crosswalks at the southwest corner be completed to improve pedestrian safety.

Bicycle lanes are designated on Thomas Road and Princevalle Street. We recommend that the frontage of the proposed project provide enough width to allow for the installation of 5-foot bicycle lanes on Luchessa Avenue. It should be noted that the City of Gilroy Traffic Circulation Master Plan (Higgins Associates, April 2004) has identified proposed bicycle lanes on Luchessa Avenue, Church Street, and Monterey Street. The proposed project should not preclude construction of the proposed bikeways as identified in the Traffic Circulation Master Plan.

The proposed project is not expected to generate a substantial amount of transit ridership (approximately 4% according to census data). When applied to the projected trip generation estimates the proposed project would generate 9 AM and 16 PM peak-hour transit trips. Therefore, the proposed project would not cause a significant impact to the transit facilities. It is recommended that the project sponsor coordinate with the City of Gilroy and VTA to determine the need for a bus stop in the vicinity of the Luchessa Avenue/Monterey Street intersection.

1. INTRODUCTION

This report presents the results of the Transportation Impact Analysis (TIA) conducted for the proposed Urban Services Area (USA) amendment project in Gilroy, California. The project site is located in the southwest quadrant of the Monterey Road and Luchessa Avenue intersection. For the purposes of this study access to the site will be provided via two driveways on Luchessa Avenue. The site location and surrounding roadway networks are presented on Figure 1.

The proposed project includes 250 residential units (220 single family and 30 apartments units) and 18,000 s.f of commercial uses. At the time of this study, a site plan was not available for review. Based on consultation with City of Gilroy staff, it was assumed that access to the project site will be provided by new streets that will intersect with Luchessa Avenue at Church Street and at Hyde Park Drive.

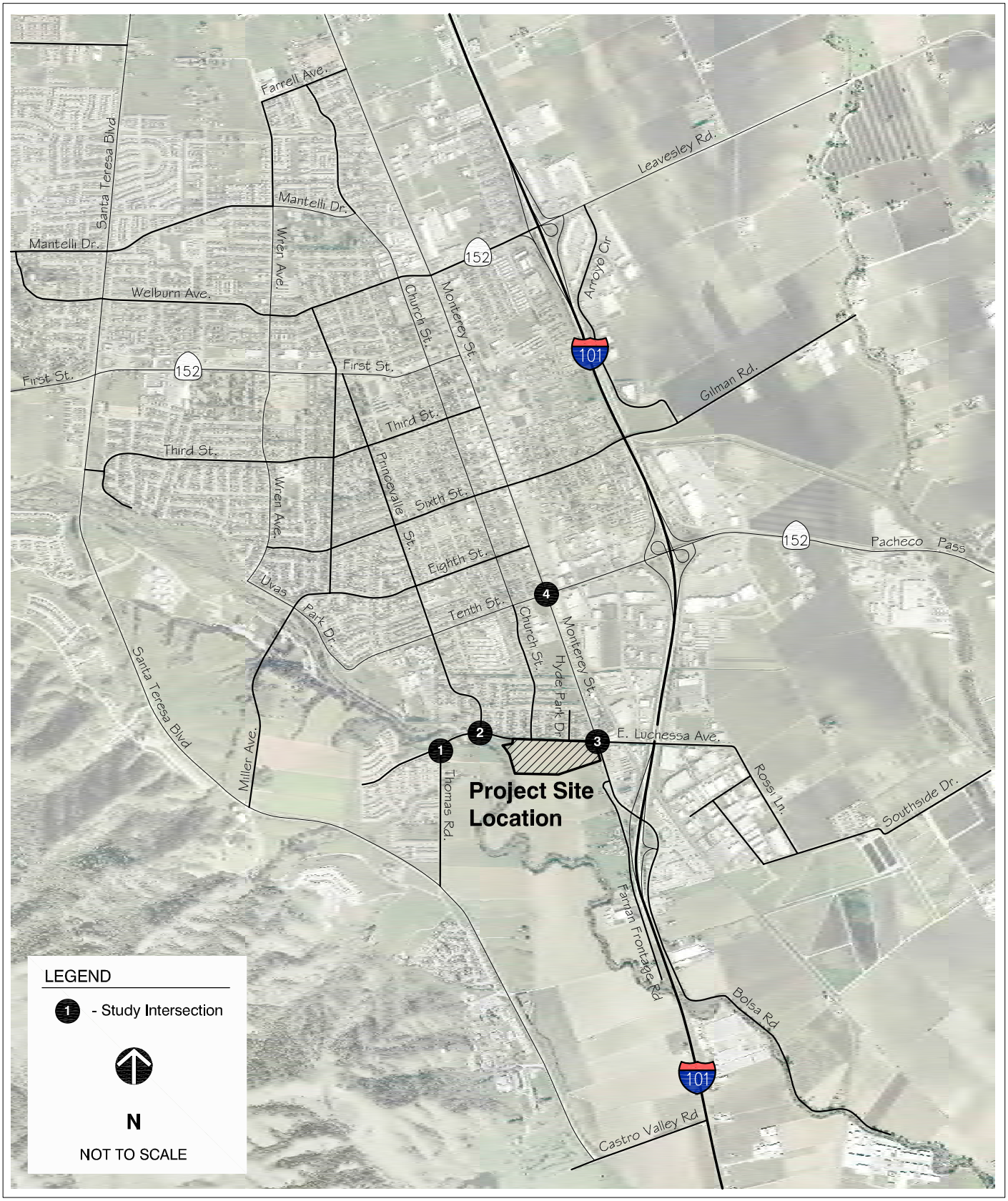
The purpose of this analysis is to identify the potential impacts of the proposed development on the transportation system in the vicinity of the site. The impacts of the proposed project were estimated following the guidelines set forth by the City of Gilroy and the Santa Clara Valley Transportation Authority (VTA), which is the congestion management agency for Santa Clara County. The following key intersections and freeway segments were evaluated for potential impacts:

Intersections

1. Luchessa Avenue and Thomas Road Monterey Street and Luchessa Avenue
2. Luchessa Avenue at Princevalle Street Monterey Street and Tenth Street
3. Monterey Street and Luchessa Avenue
4. Monterey Street and Tenth Street

Freeway Segments

1. US 101, Monterey Street to Bloomfield Ave
2. US 101, Tenth Street to Monterey Street
3. US 101, Leavesley Road to Monterey Street



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SITE LOCATION

FIGURE 1

The operations of the key intersections and freeway segments were evaluated during the morning (AM) and evening (PM) peak hours. The intersections were evaluated for the following scenarios:

- Scenario 1: Existing Conditions. Existing volumes obtained from counts, representing peak one-hour traffic conditions during the morning and evening commute period.
- Scenario 2: Background Conditions. Existing peak hour volumes plus traffic from approved but not yet constructed developments in the area.
- Scenario 3: Project Conditions. Background volumes plus traffic generated by the proposed development.
- Scenario 4: Cumulative Conditions. Existing traffic volumes plus traffic associated with approved and pending (proposed but not approved) developments plus project-generated traffic.

Potential impacts on the adjacent freeway segments were evaluated following CMP guidelines.

This report is divided into five chapters. Chapter 2 describes Existing Conditions in terms of the existing roadway facilities, transit service, bicycle and pedestrian facilities, traffic volumes, and traffic operations of the study intersections and freeway segments. Chapter 3 describes the approved developments in the area and traffic operations for Background Conditions. Chapter 4 describes the methodology used to estimate project traffic and its impacts on the roadway system, as well as impacts to other travel modes. Cumulative Conditions are presented in Chapter 5.

2. EXISTING CONDITIONS

This chapter provides a description of Existing Conditions in terms of the roadway facilities, traffic volumes, intersection and freeway operations, bicycle and pedestrian facilities, and transit service.

ROADWAY NETWORK

Regional access to the project site is provided by US 101 and State Route 152 (SR 152), while local access is provided by Monterey Street, Farman Frontage Road, Luchessa Avenue, Thomas Road, Princevalle Street, and Church Street. Each key roadway is described below.

US 101 provides access to the project site via an interchange at Monterey Street and SR 152 (Tenth Street). North of its interchange with Monterey Street, US 101 is a six-lane freeway. South of Monterey Street, US 101 becomes a four-lane conventional highway. US 101 extends northward through San Jose and San Francisco and southward through the California Central Coast.

SR 152 (Pacheco Pass Highway) connects US 101 to Interstate 5 and Highway 99 in the California Central Valley. Within the study area, SR 152 is designated on Pacheco Pass Highway and continues north on US 101. SR 152 is also designated on portions of Leavesley Road and Monterey Street. West of Monterey Street, SR 152 extends westward along First Street. Pacheco Pas Highway becomes Tenth Street west of US 101.

Tenth Street is an east-west arterial that extends between Uvas Park Drive and US 101. Tenth Street provides four to six travel lanes and an interchange with US 101. Tenth Street becomes Pacheco Pass Highway east of US 101.

Monterey Street is, a two- to four-lane arterial through the City of Gilroy. Through downtown Gilroy (between Third and Seventh Streets), Monterey Street includes two travel lanes in each direction. North of the City Limits, Monterey Street becomes Monterey Road, a rural highway with four travel lanes and a center turn lane. Monterey Road continues northward into San Jose. South of its interchange with US 101, Monterey Street becomes Bolsa Road. Adjacent to the project site, Monterey Street includes four travel lanes and the posted speed limit is 50 miles per hour (mph).

Farman Frontage Road (formerly Monterey Frontage Road) is a two-lane road that extends southward from Monterey Street, north of the Monterey Street/US 101 interchange, ending in a cul-de-sac south of the project site. Farman Frontage Road is located along the west side of US 101.

Luchessa Avenue is a two-to-four lane roadway, which extends eastward from Greenfield Drive and terminates east of US 101, east of its intersection with Rossi Lane. The segment of Luchessa Avenue between Thomas Road and Monterey Street was recently renamed from Thomas Road to Luchessa Avenue. Near the project site, Luchessa Avenue is two lanes wide, and the speed limit is 40 mph.

Thomas Road is a two-lane roadway that extends northward from Santa Teresa Boulevard to its all-way stop controlled intersection with Luchessa Avenue. The speed limit is 40 mph on Thomas Road.

Princevalle Street is a two-lane residential collector street in the vicinity of the project site. Princevalle Street extends southward from First Street to Luchessa Avenue. This street has a posted speed limit of 30 mph.

Church Street is a two-lane street in the vicinity of the project site. Church Street extends northward from Luchessa Avenue through Gilroy to north of Farrell Avenue. Church Street between Luchessa Avenue and Farrell Avenue is designated an arterial in the current General Plan and has a posted speed limit of 35 mph.

TRANSIT SERVICE

Bus service in Santa Clara County is operated by the Santa Clara Valley Transportation Authority (VTA). Currently, there are two bus routes operating within one-half mile of the project site: Route 68 and Route 17. Figure 2 presents the transit and pedestrian facilities in the vicinity of the project site.

Route 68 operates along Princevalle Street, north of Luchessa Avenue and along Luchessa Avenue and Thomas Road, west of Princevalle Street. Route 68 provides service between San Jose Diridon CalTrain Station and Gavilan College in Gilroy. Hours of operation are 4:15 am to 1:15 am on weekdays and 5:45 am to 1:15 am on weekends. Route 68 operates on a 15-minute headway during the commute hours and a 30 to 60-minute headway during other hours.

Route 17 operates along Monterey Street, north of Tenth Street and continues along Tenth Street, on SR 152 eastward. Route 17 provides local service between St. Louise Regional Hospital and the Gilroy CalTrain Station. Hours of operation are 7:15 am to 7:15 pm on weekdays and 9:00 am to 6:45 pm on weekends. Route 17 operates on a 45-minute headway during weekdays and a 60-minute headway during weekends.

Commuter rail service (CalTrain) is provided from Gilroy to San Francisco by the Joint Powers Board. CalTrain provides frequent train service between San Jose and San Francisco seven days a week. During commute hours, CalTrain provides service via three northbound trains from Morgan Hill and Gilroy during the morning commute period and three southbound trains to Morgan Hill and Gilroy during the evening commute period. The Gilroy station near the intersection of Seventh and Monterey Streets is the closest station to the project site.

PEDESTRIAN AND BICYCLE FACILITIES

Pedestrian facilities comprise sidewalks, crosswalks, and pedestrian signals. Near the site, few pedestrian facilities are provided. A sidewalk is located along the north side of Luchessa Avenue between Monterey Street and Princevalle Street. Sidewalks are discontinuous along Monterey Street in the vicinity of the project site.

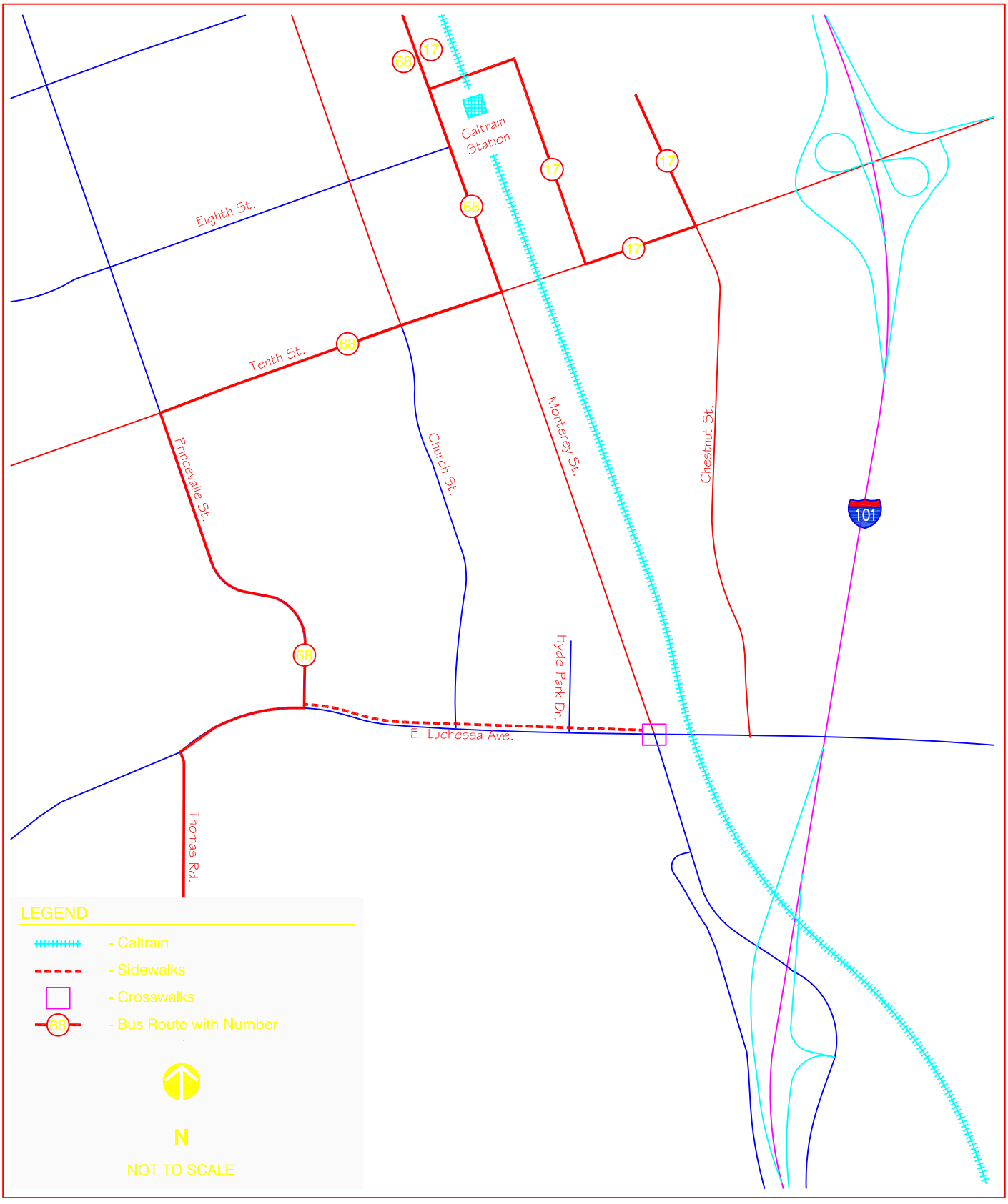
Bicycle facilities comprise bike paths, bike lanes, and bike routes. Bike paths are paved trails that are separated from the roadways. Bike lanes are lanes on roadways that are designated for use by bicycles by striping, pavement, legends, and signs. Bike routes are roadways that are designated for bicycle use with signs. Currently, there is a bike path along the eastern side of Uvas Creek between Luchessa Avenue and Westwood Avenue, north of the site. Bike lanes are designated on Princevalle Street, between Luchessa Avenue and Sixth Street, and on Thomas Road starting at Luchessa Avenue and continuing to Babbs Creek Drive.

EXISTING INTERSECTION VOLUMES AND LANE CONFIGURATIONS

Intersection operations were evaluated for both morning (AM) and evening (PM) peak-hour traffic conditions. Intersection turning movement counts were conducted during the morning commute periods from 7:00 to 9:00 am and during the evening period from 4:00 to 6:00 pm at the study intersections in May 2005. The detailed intersection turning movement counts are presented in Appendix A. Figure 3 shows the existing AM and PM peak-hour intersection turning-movement volumes, as well as the existing intersection lane configurations and traffic control devices.

LEVEL OF SERVICE METHODOLOGIES

The operations of the roadway facilities are described with the term level of service. Level of Service (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, the best operating conditions, to LOS F, or the worst operating conditions.



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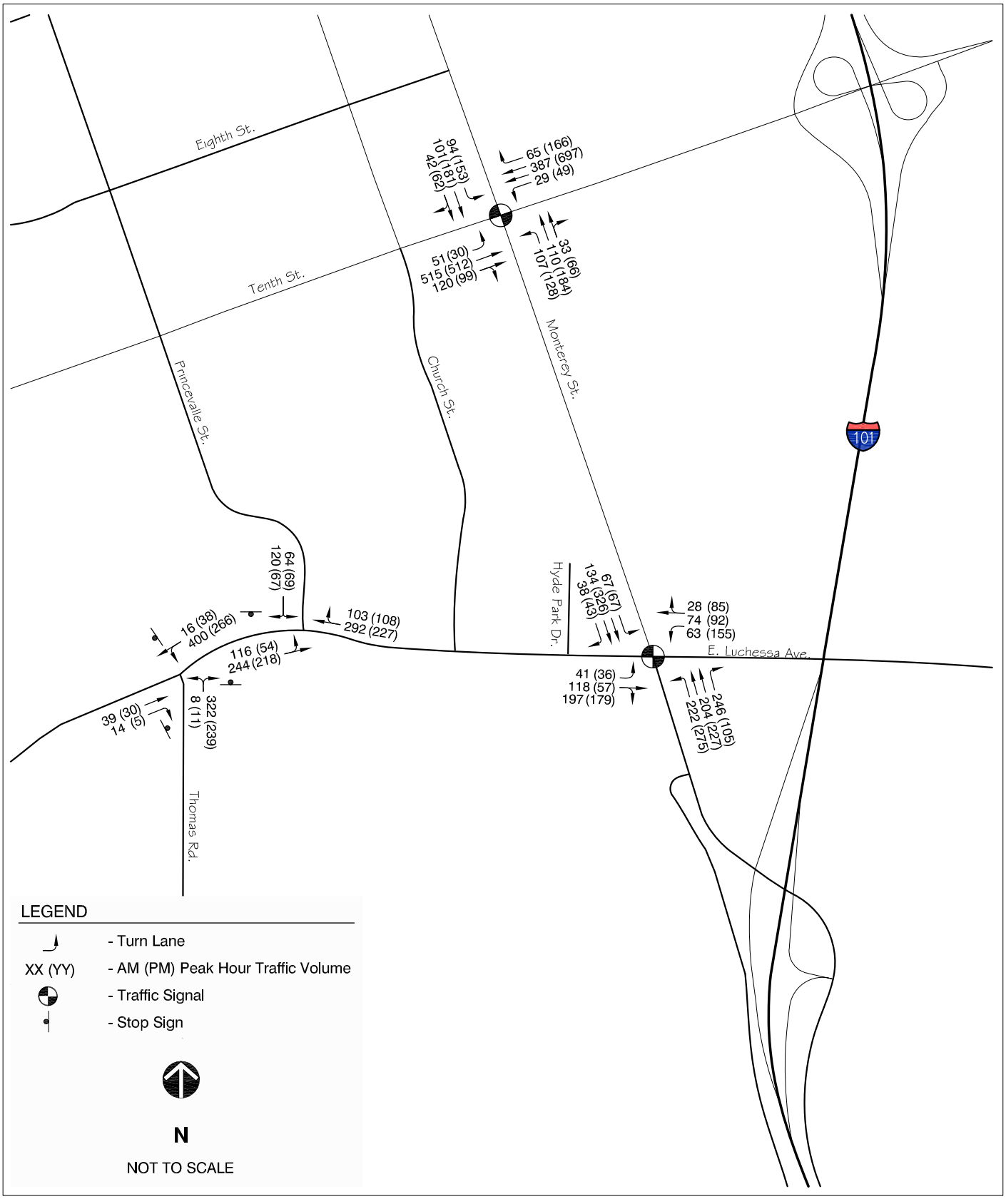
EXISTING TRANSIT AND PEDETRIAN FACILITIES

FIGURE 2



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EXISTING LANE CONFIGURATION AND PEAK HOUR VOLUMES

FIGURE 3

LOS E represents "at-capacity" operations. When volumes exceed capacity, stop-and-go conditions result, and operations are designated as LOS F.

The City of Gilroy's standard for intersections and roadway segments is Level of Service C. LOS D is allowed at certain locations including roadways east of US 101, Monterey Street between Luchessa Street and US 101, Luchessa Street between US 101 and Monterey Street, and Tenth Street between US 101 and Monterey Street. Furthermore, LOS D or better is considered an acceptable operating level for the worst-case movement/approach at an unsignalized intersection. Thus, LOS D is considered the minimum acceptable operating level for both signalized study intersections and the worst-case approach at the Luchessa Street/Princevalle Street intersection. LOS C is considered the minimum acceptable level at the Luchessa Street/Thomas Road intersection and the overall level at the Luchessa Street/Princevalle Street intersection. The CMP standard for freeway segments during peak periods is LOS E.

INTERSECTIONS

The level of service calculation methodology for intersections is dependent on the type of traffic control device: traffic signals or stop signs. The signalized intersection level of service methodology adopted by the City of Gilroy and approved by the VTA bases an intersection's operation on average control delay for all vehicles entering the intersection calculated using the method described in Chapter 16 of the 2000 Highway Capacity Manual (HCM) (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 is calculated using the TRAFFIX analysis software and is correlated to a level of service designation as shown in Table 1.

The operations of the unsignalized intersections were evaluated using the methodology contained in Chapter 17 of the 2000 Highway Capacity Manual. 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-controlled intersections, the control delay is calculated for each movement and for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. Table 2 summarizes the relationship between delay and LOS for unsignalized intersections.

FREEWAY SEGMENTS

Freeway segments were evaluated using the methodology required by the VTA. The VTA's analysis procedure is based on the density of the traffic flow using methods described in the 2000 Highway Capacity Manual. Density is expressed in passenger cars per mile per lane. The Congestion Management Program freeway segment level of service criteria are shown in Table 3. These criteria are based on the 2000 HCM level of service criteria with adjustments to reflect local (Santa Clara County) conditions.

TABLE 1

SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS

USING AVERAGE CONTROL DELAY

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 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	55.1 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

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

TABLE 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 delay	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: Transportation Research Board, *Highway Capacity Manual*, 2000.

TABLE 3

DENSITY-BASED FREEWAY LEVEL OF SERVICE CRITERIA

Level of Service	Density (vehicles/mile/lane)
A	≤ 11
B	11.0 to 18.0
C	18.0 to 26.0
D	26.0 to 46.0
E	46.0 to 58.0
F	> 58.0

Source: VTA's CMP *Traffic Level of Service Analysis Guidelines*, June 2003.

EXISTING LEVELS OF SERVICE

Intersections

Operations of the key intersections were evaluated with the existing volumes and existing lane configurations as inputs to the TRAFFIX level of service calculation program. Under Existing Conditions, the Princevalle Street/Luchessa Avenue study intersection is controlled with a stop sign on the minor street approach. The Thomas Road/Luchessa Avenue intersection is controlled with stop signs on all approaches, while the intersections of Monterey Street/Luchessa Avenue and Monterey Street/Tenth Street are signalized.

Table 4 presents the levels of service for the study intersections. The worst-case movement or lane group, usually the left-turn movement from the minor (stop sign-controlled) street is reported for the unsignalized intersection. The level of service calculation worksheets are contained in Appendix C. The unsignalized intersections are operating at LOS C or better, an acceptable level of service. The signalized intersections are operating at LOS C- or better during both peak hours.

Freeway Segments

Table 5 contains the existing freeway segment levels of service based on the segment densities reported in the CMP's 2004 Monitoring and Conformance Report. The segments of US 101 reported in this table were chosen to be consistent with the segments in the VTA's monitoring report. Based on the monitored freeway segment densities, all of the freeway segments in the vicinity of the site are operating at LOS D or better during both peak hours under Existing Conditions.

TABLE 4

EXISTING INTERSECTION LEVELS OF SERVICE

Intersection	Traffic Control	Los Standard[1]	Peak Hour	Overall Intersection (Worst Movement/Approach)	
				Delay[2]	LOS[3]
1. Luchessa Avenue/ Thomas Road	All-way Stop	C	AM PM	12.6 9.8	B A
2. Luchessa Avenue/ Princevalle Street	Side-street Stop	C(D)	AM PM	4.3(16.5) 3.0(13.4)	A(C) A(B)
3. Luchessa Avenue/ Monterey Street	Signal	D	AM PM	23.9 34.0	C C-
4. Monterey Street/ Tenth Street	Signal	D	AM PM	15.1 19.7	B C+

Notes:
1 The minimum acceptable overall level of service according to the City of Gilroy standards. The number in parentheses represents the worst case movement/approach.
2 Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. For unsignalized intersections, overall control delay and for the worst movement/approach (presented in parentheses), expressed in seconds per vehicle, is presented. Calculations performed using the 2000 Highway Capacity Manual (HCM) methodology contained in TRAFFIX.
3 LOS = Level of service

FIELD OBSERVATIONS

Field observations were conducted at the key intersections in June 2005. Both unsignalized study intersections were observed to be operating at acceptable levels of service. Slight congestion was observed for left turning vehicles from Princevalle Street onto Luchessa Avenue (southbound left turning vehicles) in the morning peak hour due to traffic to and from the local high school on Princevalle Street.

At the intersection of Monterey Street and Tenth Street, the eastbound through traffic in the morning was typically high enough to prevent westbound left-turning vehicles from completing this maneuver. This is primarily due to the permitted signal phasing and the heavy east bound traffic toward US 101 during the morning commute period.

The field observations support the calculated level of service results in Table 4 for Existing Conditions.

TABLE 5

EXISTING FREEWAY SEGMENT LEVELS OF SERVICE [1]

Freeway	Segment	Direction & Lane Type	Peak Hour	No. of Lanes	Volume	Average Speed	Density	LOS[2]
US 101	Monterey Street to Bloomfield Ave	NB MF	AM	2	3700	66	28	D
		NB MF	PM	2	4030	65	31	D
		SB MF	AM	2	2010	67	15	B
		SB MF	PM	2	3770	65	29	D
US 101	Tenth Street/Pacheco Pass to Monterey Street	NB MF	AM	3	3020	67	15	B
		NB MF	PM	3	3220	67	16	B
		SB MF	AM	3	2210	67	11	A
		SB MF	PM	3	3620	67	18	B
US 101	Leavesley Road to Tenth Street/Pacheco Pass	NB MF	AM	3	3760	66	19	C
		NB MF	PM	3	3020	67	15	B
		SB MF	AM	3	2610	67	13	B
		SB MF	PM	3	4750	66	24	C

Notes:

1 Source of lanes, volumes, and density: VTA's *2004 VTA CMP Database (September 2004)*.

2 LOS is based on density.

MF = Mixed-Flow Lanes

3. BACKGROUND CONDITIONS

This chapter discusses the operation of the key intersections under Background Conditions. Background Conditions are defined as the traffic conditions prior to completion of the proposed development. Roadway improvements anticipated to be in place under Background Conditions are also described in this chapter. Traffic volumes for Background Conditions comprise existing volumes from counts plus traffic generated by approved, yet not constructed, developments in the area. The results of the level of service analysis for Background Conditions are presented and form the baseline for determining project impacts.

BACKGROUND TRAFFIC ESTIMATES

The traffic volumes for Background Conditions were estimated by adding traffic generated by approved but not yet constructed projects in the vicinity of the site to existing volumes. The list of approved projects was developed with input from City of Gilroy Planning staff. Appendix C contains a list of approved developments.

The traffic associated with the approved projects was estimated based on trip generation rates published in the Institute of Transportation Engineers Trip Generation (7th Edition) or obtained from traffic studies prepared for those developments. Trip generation estimates for the approved developments are included in Appendix C. The trips associated with each project were then assigned to the roadway network based on the trip distribution patterns contained in the City of Gilroy Traffic Monitoring Program TRAFFIX model, relative locations of complementary land uses, and existing travel patterns. The traffic associated with the approved developments was added to the existing volumes at the key intersection to estimate traffic volumes for Background Conditions. Figure 4 illustrates the traffic volumes estimated at the key intersections for Background Conditions.

BACKGROUND LEVELS OF SERVICE

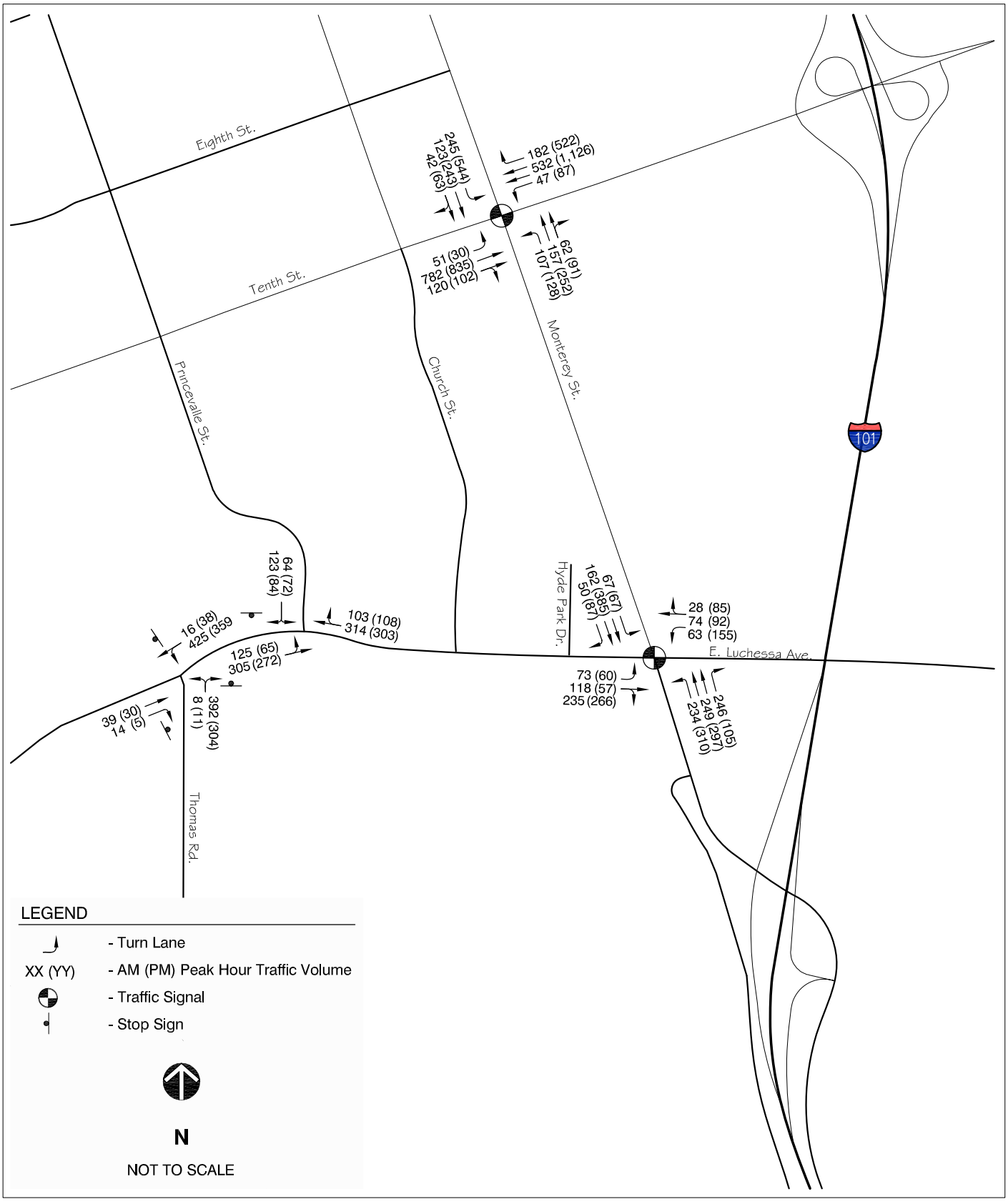
The results of the intersection level of service calculations for Background Conditions are presented in Table 6. The LOS calculation sheets are contained in Appendix B. All unsignalized intersections are operating at LOS C or better under this scenario. The two signalized intersections are operating at acceptable levels of service according to their level of service standard (LOS D).

TABLE 6

BACKGROUND INTERSECTION LEVELS OF SERVICE

Intersection	Traffic Control	Los Standard[1]	Peak Hour	Overall Intersection (Worst Movement/Approach)	
				Delay[1]	LOS[2]
1. Luchessa Avenue/ Thomas Road	All-way Stop	C	AM PM	14.4 11.9	B B
2. Luchessa Avenue/ Princevalle Street	Side-street Stop	C(D)	AM PM	4.3 (18.4) 3.3(15.9)	A(C) A(C)
3. Luchessa Avenue/ Monterey Street	Signal	D	AM PM	24.6 33.4	C D+
4. Monterey Street/ Tenth Street	Signal	D	AM PM	17.8 28.5	B- C

Notes:
1 The minimum acceptable overall level of service according to the City of Gilroy standards. The number in parentheses represents the worst case movement/approach.
2 Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. For unsignalized intersections, overall control delay and for the worst movement/approach (presented in parentheses), expressed in seconds per vehicle, is presented. Calculations performed using the 2000 Highway Capacity Manual (HCM) methodology contained in TRAFFIX.
3 LOS = Level of service



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BACKGROUND INTERSECTION PEAK HOUR VOLUMES

FIGURE 4

4. PROJECT CONDITIONS

The transportation impacts of the proposed project are discussed in this chapter. First, the method used to estimate the amount of traffic added to the roadway system by the project is described. Then, the results of the level of service calculations for Project Conditions are presented. A comparison of intersection operating levels under Background and Project Conditions is then presented, followed by a description of the impacts of the proposed project on the key intersections and freeway segments. Site access is also addressed in this chapter.

PROJECT TRAFFIC ESTIMATES

The amount of traffic associated with a project is estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In the first step, the amount of traffic entering and exiting the site is estimated. In the second step, the directions the trips use to approach and depart the site are projected. The trips are then assigned to specific street segments and intersection turning movements in the third step. The results of this process for this study are described in the following sections.

Trip Generation

The amount of traffic generated by the proposed residential and commercial units was estimated by applying appropriate trip generation rates to each type of proposed land use. Trip generation rates for "Shopping Center" (820), "Single-Family Detached" (210), and "Apartment" (220) land use from the Institute of Transportation Engineers' (ITE) Trip Generation (7th Edition) were used to estimate the number of project trips.

A reduction of 25 percent was applied to the commercial trips to account for pass-by trips during the peak hours. Pass-by trips are trips to the site made by vehicles already traveling by the site on the adjacent street (i.e., these vehicles make an interim stop between their primary origin and destination). Pass-by trips are included in the analysis of traffic that enters and exits the project site, but are not considered "new" trips added to the street system by the project.

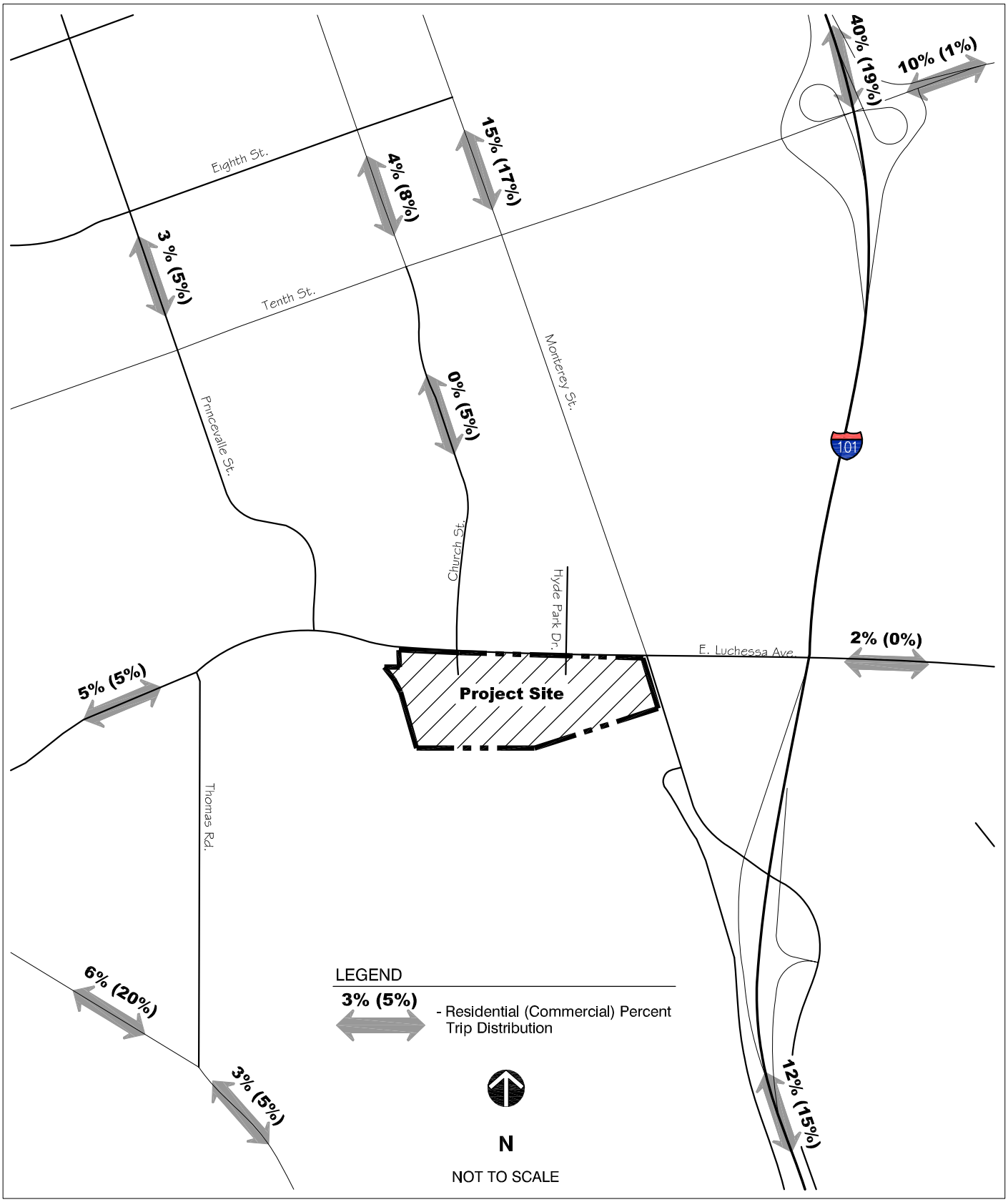
Table 7 presents the trip generation estimates. The proposed commercial uses and residential units combined generate 4,707 daily trips, 223 AM peak-hour trips (72 inbound/151 outbound), and 403 PM peak-hour factor trips (230 inbound/173 outbound).

Trip Distribution

The trip distribution pattern was developed based on existing travel patterns in the vicinity of the site and the relative locations of complementary land uses in the area. Separate trip distribution patterns were developed for each project component. Figure 5 presents the major directions of approach and departure.

Trip Assignment

The peak-hour trips generated by the proposed project were assigned to the roadway system based on the distribution pattern described above. Figure 6 presents the estimates of project trips at the key intersections. Project trips were added to background traffic volumes to estimate volumes under Project Conditions as shown on Figure 7.



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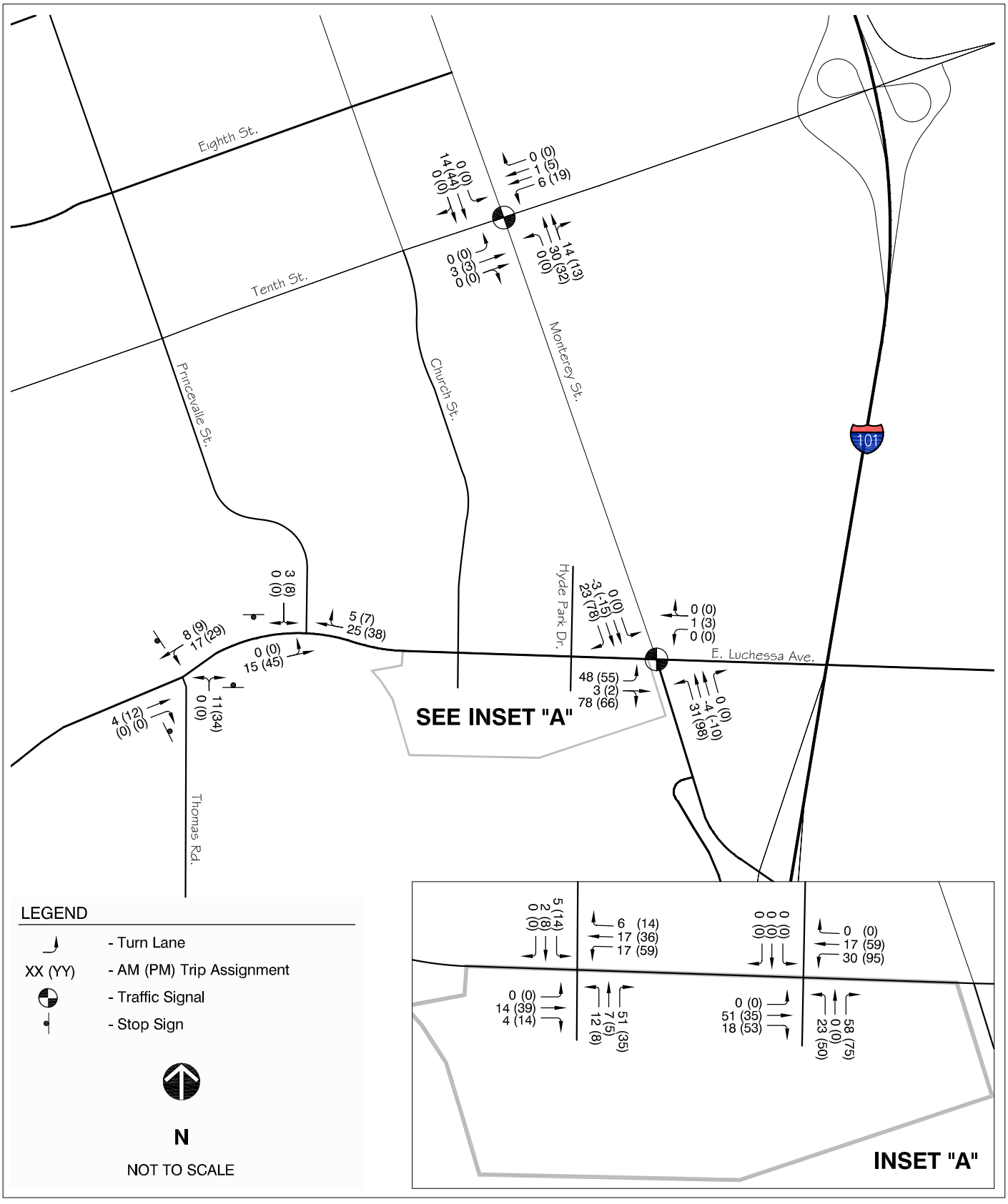
TRIP DISTRIBUTION PATTERN

FIGURE 5



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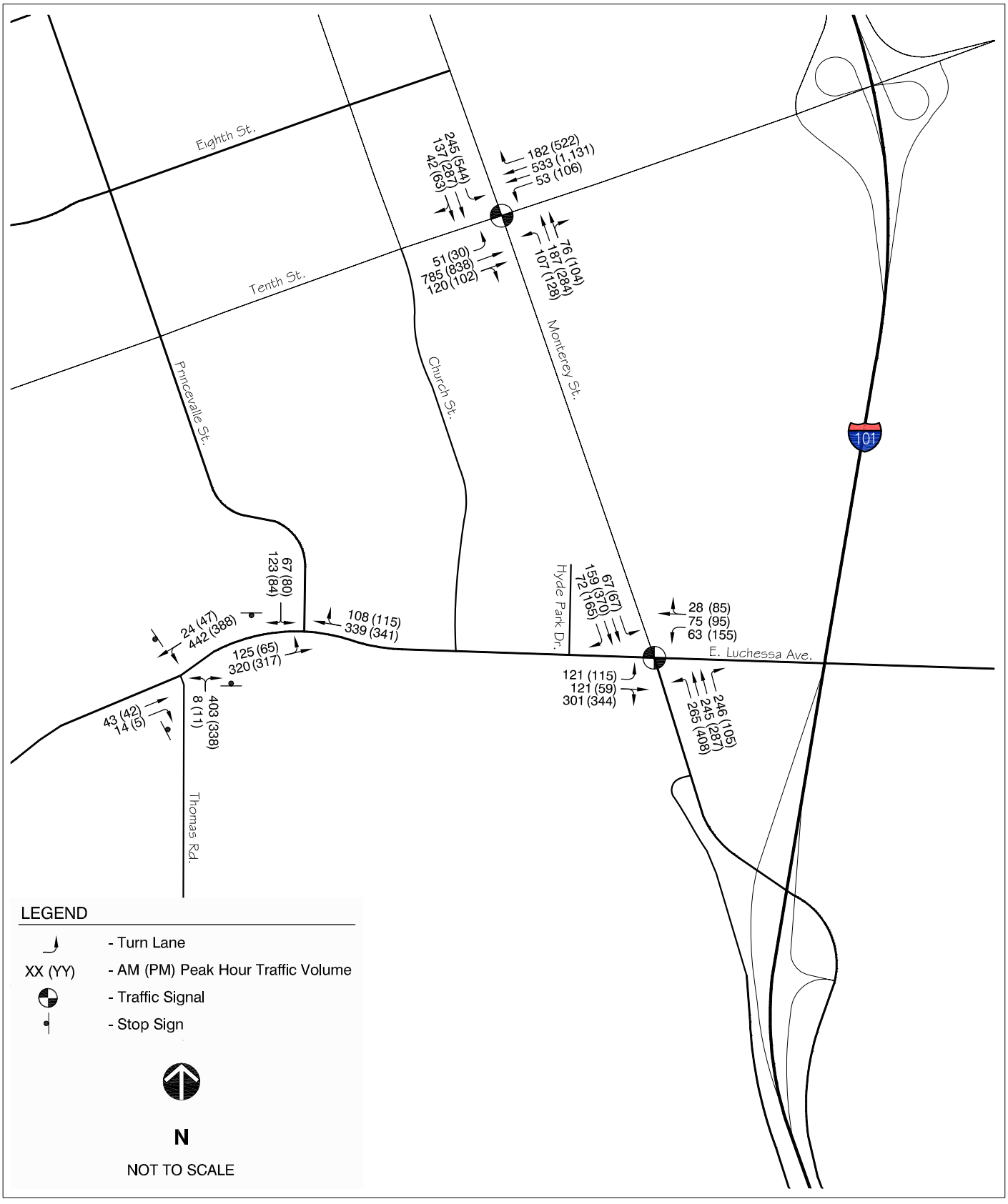
TRIP ASSIGNMENT

FIGURE 6



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PROJECT INTERSECTION PEAK HOUR VOLUMES

FIGURE 8

TABLE 7

PROJECT TRIP GENERATION ESTIMATES

Use	Size	Weekday		AM Peak Hour				PM Peak Hour			
		Rate[1]	Trips	Rate[1]	In	Out	Total	Rate[1]	In	Out	Total
Commercial	18,000 s.f.	123.78	2,228	3.11	34	22	56	11.22	97	105	202
			Passby[2]	25%	-7	-7	-14	25%	-26	-25	-51
Homes	220 d.u.	9.8	2,148	0.74	41	122	163	0.99	137	81	218
Apartment	30 d.u.	11.0	331	0.60	4	14	18	1.13	22	12	34
Net New Trips			**4,707**		**72**	**151**	**223**		**230**	**173**	**403**

Notes:

1 Trips per square foot or dwelling unit.

2 Passby rate of 25% used to be consistent with other commercial developments in the Gilroy area.

Source: *Trip Generation* (Institute of Transportation Engineers, 7th Edition)

PROJECT INTERSECTION LEVELS OF SERVICE

Intersection levels of service calculations were conducted to evaluate intersection operations under Project Conditions. The results of the LOS analysis for Background and Project Conditions are summarized in Table 8. The corresponding LOS calculation sheets are included in Appendix C.

All intersections are operating at acceptable levels of service during both peak hours.

FREEWAY SEGMENT ANALYSIS

According to CMP 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 during the AM and PM peak hours to determine if a significant amount of project traffic would be added to these freeway segments. Capacities of 2,300 and 1,800 vehicles per hour per lane (vphpl) were used for the mixed flow and HOV lanes, respectively. Table 9 presents the results of the freeway segment analysis.

The CMP defines a project as having a significant impact on a freeway segment if:

1. The addition of project traffic causes the operating level of a freeway segment to deteriorate from LOS E (or better) under Existing Conditions to LOS F; or
2. The number of new trips added by a proposed project to a segment already operating at LOS F under Existing Conditions is more than one percent of the freeway segment capacity.

All segments are operating at an acceptable level of service during both peak hours. The results of the freeway level of service analysis indicates that the proposed project would not have a significant impact on any of the segments of US 101 as illustrated in Table 9.

TABLE 8

BACKGROUND AND PROJECT INTERSECTION LEVELS OF SERVICE

Intersection and Scenario	LOS Threshold	Peak Hour	Overall Intersection (Worst Movement/Approach	
			Delay[1]	LOS[3]
1. Luchessa Street and Thomas Road				
Background Conditions	C	AM PM	14.4 11.9	B B
Project Conditions	C	AM PM	15.6 13.3	C B
2. Luchessa Street and Princevalle Street				
Background Conditions	C(D)	AM PM	4.3(18.4) 3.3(15.9)	A(C) A(C)
Project Conditions	C(D)	AM PM	4.5(20.0) 3.5(18.3)	A(C) A(C)
3. Luchessa Avenue and Monterey Street				
Background Conditions	D	AM PM	24.6 33.4	C D+
Project Conditions	D	AM PM	26.7 37.8	C D
4. Monterey Street and Tenth Street				
Background Conditions	D	AM PM	17.8 28.5	B- C
Project Conditions	D	AM PM	18.3 29.2	C+ C-

Notes:

1 The minimum acceptable overall level of service according to the City of Gilroy standards. The number in parentheses represents the worst case movement/approach.

2 Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. For unsignalized intersections, overall control delay and for the worst movement/approach (presented in parentheses), expressed in seconds per vehicle, is presented. Calculations performed using the 2000 Highway Capacity Manual (HCM) methodology contained in TRAFFIX.

3 LOS = Level of service

Significant impacts highlighted in **bold.**

TABLE 9

US 101 FREEWAY SEGMENT ANALYSIS

Segment	Direction	Capacity[2] (Vehicles)	Peak Hour	Existing Conditions[1]				Project Conditions			
				Avg. Speed[3]	Volume	Density[4]	LOS[5]	Project Trips	Density[4]	LOS[5]	Percent Impact[6]
Bloomfield Ave to Monterey Street	NB	4,600	AM	66	3,700	28	D	11	28	D	0.25
			PM	65	4,030	31	D	35	31	D	0.80
Monterey Street to Tenth Street/Pacheco Pass	NB	6,900	AM	67	3,020	15	B	40	15	B	0.58
			PM	67	3,220	16	B	37	16	B	0.54
Tenth Street/Pacheco Pass to Leavesley Road	NB	6,900	AM	66	3,760	19	C	57	19	C	0.83
			PM	67	3,020	15	B	53	18	C	0.77
Monterey Street to Bloomfield Ave	SB	4,600	AM	67	2,010	15	B	23	15	B	0.52
			PM	65	3,770	29	D	26	29	D	0.59
Tenth Street/Pacheco Pass to Monterey Street	SB	6,900	AM	67	2,210	11	A	16	11	B	0.78
			PM	67	3,620	18	B	54	18	C	0.78
Leavesley Road to Tenth Street/Pacheco Pass	SB	6,900	AM	67	2,610	13	B	23	13	B	0.33
			PM	66	4,750	24	C	77	24	C	1.12

Notes:

1 Density based on volume from VTA 2004 CMP Monitoring Data (September 2004)

2 In vehicles per hour per lane (VPH).

3 In miles per hour (MPH).

4 In vehicles per mile per lane (vpmpl).

5 LOS = Level of Service. LOS based on density.

6 Percent impact determined by dividing the number of project trips by the freeway segment's capacity.

7 NB = Northbound, SB = Southbound

SIGNIFICANT IMPACT CRITERIA

Signalized Intersection

A significant impact is defined to occur at a signalized City of Gilroy intersection when the addition of project traffic causes:

1. Intersection operations to deteriorate from an acceptable level (LOS A, B, C, or D) under Background Conditions to an unacceptable level (LOS D, E, or F); or
2. An increase in average delay of 2 or more seconds for an intersection operating at unacceptable conditions LOS D; or
3. An increase in average delay of 1 or more second for an intersection operating at LOS E or F.

The intersections of Luchessa Avenue/Monterey Street and Monterey Street and Tenth Street are projected to operate at LOS D or better (an acceptable level) during both peak hours under Project Conditions. Therefore, the proposed project has a less-than-significant impact to these intersections.

Unsignalized Intersection

A significant impact is defined to occur at an unsignalized City of Gilroy intersection when the addition of project traffic causes:

1. Overall intersection operations to deteriorate from an acceptable level (LOS C or better) under Background Conditions to an unacceptable level (LOS D, E, or F); or
2. The peak-hour volume traffic signal warrant from Caltrans' Traffic Manual to be satisfied and the worst movement/approach is operating at LOS E or F.

The worst movement/approach at the unsignalized study intersections are operating at LOS C or better, an acceptable level of service. Therefore, the proposed project has a less-than-significant impact at the unsignalized intersections.

A peak-hour signal warrant analysis was conducted for both of the unsignalized study intersections under Project Conditions. The peak-hour signal warrant analyses are presented in Appendix D. The results indicate that a signal is not warranted at either intersection based on the MUTCD peak-hour warrant.

OTHER OPERATIONAL ISSUES

The overall operations of the Monterey Street/Tenth Street intersection are projected to operate acceptably under Project Conditions. However, it was observed that the permitted phasing for the eastbound and westbound left-turn movements causes excessive delays for left-turning vehicles. Vehicles making these movements were occasionally prevented from making this movement in one signal cycle length due to the heavy opposing through movements. In several cases during the hour, only one vehicle was able to turn during each cycle. This creates a situation where drivers become frustrated and attempt to cross the oncoming traffic without adequate gaps in oncoming traffic. This could lead to an unsafe driving situation. The project is projected to add volume to the westbound left-turn movement during both peak hours. This increase in volume could exacerbate this condition and result in a potentially significant impact.

A left-turn phasing analysis was performed for the east and westbound left-turn movements at the Monterey Street/Tenth Street intersection under Project Conditions during both peak hours. The HCM provides a method to

help determine the need for providing a protected left-turn phase at a signalized intersection. The following four criteria are evaluated to help determine the need for protected phasing at a signalized intersection:

1. Left-turn lane check; If the number of left-turn lanes on any approach exceeds one, then protected left-turn phasing is recommended.

2. Minimum volume check; If left-turn volume on any approach exceeds 240 vehicles/hour, then protected left-turn phasing is recommended.

3. Minimum cross product check; If the cross-product on any approach exceeds the following values, protected left-turn phasing is recommended.

Number of through lanes	Minimum Cross-Product
1	50,000
2	90,000
3	110,000

4. If the left-turn equivalence factor is 3.5 or higher and the unadjusted left turn volume is greater than the sneaker capacity, then it is recommended that the left-turns on that approach be protected.

The eastbound and westbound approaches both include one left-turn lane. Therefore, the first criterion described above is not met. The highest number of eastbound or westbound left-turns is 106 vehicles per hour during the PM peak hour. Therefore, the second criterion is not met. The maximum cross-product occurs during the PM peak hour and results in a cross-product of 88,828 (838 eastbound through vehicles*106 westbound left-turning vehicles). Thus, the third criteria, described above, is not met. The sneaker capacity for this intersection is 80 during the PM peak hour with an equivalence factor of 4.0. Therefore, the fourth criteria would be satisfied,

Collision data was also obtained from the *Traffic Engineering Technical Assistance Program* (TETAP) conducted for the City of Gilroy by TY Lin International/CCS for the Monterey Street/Tenth Street intersection. This study identified 35 collisions in a three year time frame (January 2000 through December 2003) at this intersection. Thirteen of the 35 collisions in that time period were broadside and could be related to the signal phasing according to the TETAP study. The report states that changing the phasing of this intersection may reduce the number of broadside accidents.

MITIAGATION MEASURES

The implementation of a full eight phase signal operation at the Monterey Street/Tenth Street intersection would eliminate the potentially significant safety and operational impact. Providing protected left-turns on the eastbound and westbound approaches would eliminate this condition by increasing the capacity of the left-turn movement.

SITE ACCESS AND ON-SITE CIRCULATION

No site plan was available for review at the time of this study. Access to the proposed project was assumed to be provided across from Hyde Park Drive and Church Street. The new streets will provide sufficient access the project-generated traffic.

An additional access point on Monterey Street to provide the commercial land use with another ingress/egress location may be able to be accommodated. However, this location would be limited to right-turns only and would have to provide sufficient deceleration distance for vehicles entering at this location. Further engineering studies need to be completed before the feasibility of providing this access point can be determined.

A queuing analysis was performed at the Monterey Street/Luchessa Avenue intersection to evaluate the potential conflict between project-generated traffic turning into to site and vehicles queued at this intersection. The queues generated by the Traffix calculation worksheets were used to estimate queues. During the AM and PM peak periods, the 95th percentile queue expected under Project Conditions for the eastbound through movements is nineteen vehicles. This translates to approximately 475 feet (assuming each vehicle is 25 feet long).

One of the potential access points to the project site on Luchessa Avenue would be directly opposite Hyde Park Drive. The distance between Monterey Street and Hyde Park Drive is approximately 550 feet. Based on a preliminary calculation of project-generated traffic it is anticipated that the westbound left-turn queue on Luchessa Avenue into the project site would be approximately one vehicle. This assumes that Luchessa Avenue remains a side street stop controlled facility. Based on these preliminary estimates, there would not be a significant conflict with project-generated traffic accessing the project site.

Pedestrian, Bicycle and Transit Impacts

According to VTA criteria, the project would result in a significant impact to bicycles, pedestrians or transit if the project conflicts with an existing or planned facility/service or adds demand to one of these modes that is not adequately accommodated by appropriate facilities or services.

Pedestrian Facilities

Existing sidewalks are not provided continuously on the south side of Luchessa Avenue. Sidewalks on Luchessa Avenue along the project's frontage should be provided. The proposed project should improve the pedestrian crosswalks on the southwest corner of the Monterey Street and Luchessa Avenue intersection to increase the safety for pedestrians at this intersection. We recommend that sidewalks, curbs, and restriping of the crosswalks at the southwest corner be completed to improve pedestrian safety prior to the issuance of occupancy permits.

Bicycle Facilities

Bicycle lanes are designated on Thomas Road and Princevalle Street. We recommend that the frontage of the proposed project provide enough width to allow for the installation of 5-foot bicycle lanes on Luchessa Avenue. It should be noted that the City of Gilroy Traffic Circulation Master Plan (Higgins Associates, April 2004) has identified proposed bicycle lanes on Luchessa Avenue, Church Street, and Monterey Street. The proposed project should accommodate construction of the proposed bikeways as identified in the Traffic Circulation Master Plan.

Transit Service

Santa Clara Valley Transportation Authority (VTA) operates Bus Routes 68 and 17 in the vicinity of the project site. Route 68 provides service between San Jose Diridon CalTrain Station and Gavilan College in Gilroy. Route 17 provides local service between St. Louise Regional Hospital and the Gilroy CalTrain Station. VTA provided existing load factors (average number of riders) for Route 68 and Route 17. Capacities for both routes are 38 seats per bus. The average maximum load for Route 68 is 18 people (47%) and the average maximum load for Route 17 is 4 people (11%). The proposed project is not expected to generate a substantial amount of transit ridership (approximately 4% according to census data). When applied to the projected trip generation estimates the proposed project would generate 9 AM and 16 PM peak-hour transit trips. Due to the lack of transit facilities in the vicinity of the project site, it is unlikely that there would be this volume added to the transit ridership. Therefore, the proposed project would not cause a significant impact to the transit facilities.

We recommend that the project sponsor coordinate with the City of Gilroy and VTA to determine the need for a bus stop in the vicinity of the Luchessa Avenue/Monterey Street intersection.

5. CUMULATIVE CONDITIONS

This chapter presents the results of the level of service calculations under Cumulative Conditions. Cumulative Conditions are defined as existing volumes plus traffic generated by approved but not yet constructed developments, plus project-generated traffic, plus traffic associated with pending developments in the study area.

CUMULATIVE TRAFFIC ESTIMATES

Traffic volumes under this scenario were estimated by adding traffic associated with pending (proposed but not approved) developments to traffic volumes estimated for Project Conditions. Appendix C contains a list of pending developments.

Traffic volumes for these developments were estimated using the same approach to estimating traffic for approved developments. Traffic associated with the pending developments was estimated using trip generation rates from ITE Trip Generation and assigned to the roadway network based on existing travel patterns, relative locations of complementary land uses, and trip distribution patterns contained in the Gilroy traffic monitoring program TRAFFIX model. Cumulative intersection volumes are presented in Figure 8.

CUMULATIVE INTERSECTION LEVELS OF SERVICE

The operations of the key intersections were evaluated with level of service calculations and the results are presented in Table 10. The addition of traffic associated with pending projects is projected to cause the overall or worst movement/approach for both unsignalized intersections to be LOS F. The signalized intersections operate acceptably at LOS D or better in the morning; however in the evening they degrade to LOS F and E- at Luchessa Avenue and Tenth Street, respectively.

CUMULATIVE MITIGATION MEASURES

The Luchessa Avenue/Thomas Road intersection is projected to operate at an unacceptable level of service under Cumulative Conditions during both peak hours (LOS F). City staff has discussed the implementation of a roundabout at this location in the future. This improvement would result in LOS A (7.6 seconds of delay) and LOS C (23.7 seconds of delay) under Cumulative Conditions during the AM and PM peak hours, respectively. An engineering study needs to be completed to determine the ultimate design.

The intersection of Luchessa Avenue and Princevalle Street is projected to operate at an unacceptable level of service (LOS F for the worst case approach/movement) under Cumulative Conditions during both peak hours. A peak-hour signal warrant analysis was performed (see Appendix D) at this location and the warrant was exceeded. Signalization of this intersection would result in LOS B+ during both peak hours.

The intersection of Monterey Street and Luchessa Avenue is projected to operate at an unacceptable level of service (LOS F) under Cumulative Conditions during the PM peak hour. The City of Gilroy Traffic Circulation Master Plan designates Luchessa Avenue to provide four lanes along the project frontage. As identified in the Capital Improvement Budget Plan the eastbound approach of this intersection provides one left-turn lane, two through lanes, and one separate right-turn lane. Implementing this as well as an additional northbound left-turn lane would result in LOS D (48.0 seconds of delay). The additional left-turn lane improvement would require the widening of the west leg to provide two receiving lanes for the northbound left-turning vehicles. This is considered an acceptable level of service and would mitigate the project's cumulative impact. An engineering study needs to be completed to determine the ultimate design.

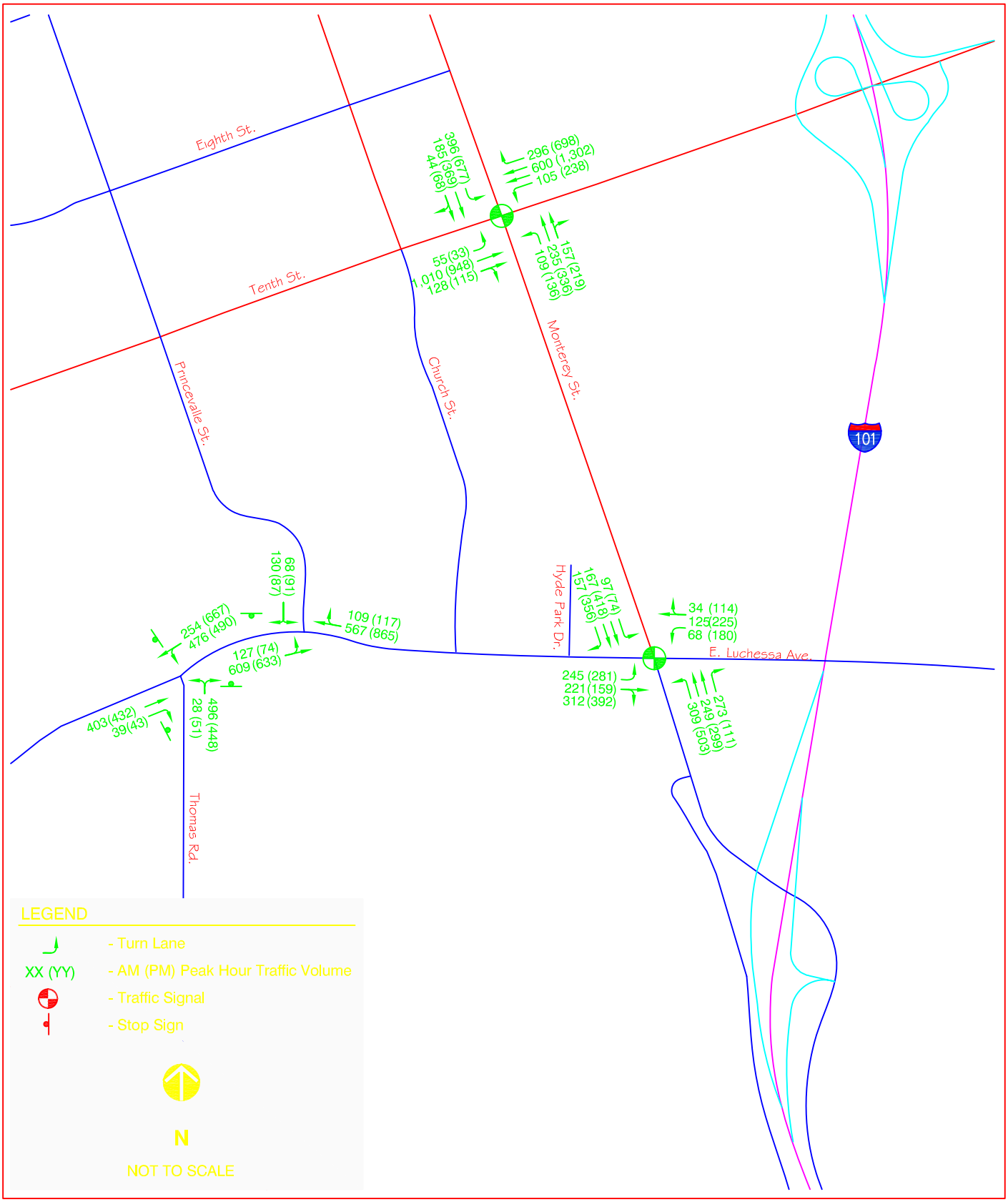
TABLE 10

CUMULATIVE INTERSECTION LEVELS OF SERVICE

Intersection	Traffic Control	LOS Threshold[1]	Peak Hour	Overall Intersection (Worst Movement/Approach)	
				Delay[2]	LOS[3]
1. Luchessa Avenue/ Thomas Road	All-way Stop	C	AM PM	>80 >80	F F
2. Luchessa Avenue/ Princevalle Street	One-way Stop	C(D)	AM PM	8.5(63.4) 20.8(>80)	A(F) C(F)
3. Luchessa Avenue/ Monterey Street	Signal	D	AM PM	42.6 >80	D F
4. Monterey Street/ Tenth Street	Signal	D	AM PM	25.7 77.9	C E-

Notes:
1 The minimum acceptable overall level of service according to the City of Gilroy standards. The number in parentheses represents the worst case movement/approach.
2 Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. For unsignalized intersections, overall control delay and for the worst movement/approach (presented in parentheses), expressed in seconds per vehicle, is presented. Calculations performed using the 2000 Highway Capacity Manual (HCM) methodology contained in TRAFFIX.
3 LOS = Level of service

The cumulative impact at the Monterey Street/Tenth Street intersection would be mitigated with the implementation of a second southbound left-turn lane, a westbound overlap phase, and providing one left-turn lane, two through lanes, and one separate right-turn lane in the northbound direction would result in LOS D (48.6 seconds of delay) during the PM peak hour under Cumulative Conditions. The mitigated level of service includes an eight phase signal with protected left-turns on all approaches as discussed under Project Conditions. This mitigation would likely require some right-of-way to accommodate this improvement. Therefore, an engineering study needs to be completed to determine the extents of the roadway that may be required to implement this improvement.



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CUMULATIVE INTERSECTION PEAK HOUR VOLUMES

FIGURE 8

APPENDIX A:
LOS CALCULATION WORKSHEETS

APPENDIX B:
LOS CALCULATIONS

APPENDIX C:
APPROVED AND PENDING PROJECT

APPENDIX D:
PEAK-HOUR SIGNAL WARRANT ANALYSIS

APPENDIX A:
INTERSECTION TURNING MOVEMENT COUNTS

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File Name : 101AMFINAL
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Groups Printed- Unshifted

	MONTEREY RD Southbound					LUCHESSA AVE Westbound					MONTEREY RD Northbound					LUCHESSA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	3	40	4	0	47	7	15	13	0	35	47	32	40	0	119	51	11	9	0	71	272
07:15 AM	10	31	9	0	50	3	4	18	0	25	47	42	33	0	122	60	19	6	0	85	282
07:30 AM	9	39	12	0	60	7	18	12	0	37	55	59	64	0	178	42	21	5	0	68	343
07:45 AM	14	38	30	0	82	5	24	22	1	52	81	60	68	0	209	52	39	22	0	113	456
Total	36	148	55	0	239	22	61	65	1	149	230	193	205	0	628	205	90	42	0	337	1353
08:00 AM	9	34	11	0	54	7	24	15	0	46	65	35	54	0	154	52	32	7	0	91	345
08:15 AM	6	23	14	0	43	9	8	14	0	31	45	50	36	0	131	51	26	7	0	84	289
08:30 AM	9	37	5	0	51	7	14	14	0	35	41	37	49	0	127	44	14	6	0	64	277
08:45 AM	5	20	17	0	42	8	18	22	0	48	53	36	39	0	128	44	27	7	0	78	296
Total	29	114	47	0	190	31	64	65	0	160	204	158	178	0	540	191	99	27	0	317	1207
Grand Total	65	262	102	0	429	53	125	130	1	309	434	351	383	0	1168	396	189	69	0	654	2560
Apprch %	15.2	61.1	23.8	0.0		17.2	40.5	42.1	0.3		37.2	30.1	32.8	0.0		60.6	28.9	10.6	0.0		
Total %	2.5	10.2	4.0	0.0	16.8	2.1	4.9	5.1	0.0	12.1	17.0	13.7	15.0	0.0	45.6	15.5	7.4	2.7	0.0	25.5	

	MONTEREY RD Southbound					LUCHESSA AVE Westbound					MONTEREY RD Northbound					LUCHESSA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Intersection	07:30 AM																				
Volume	38	134	67	0	239	28	74	63	1	166	246	204	222	0	672	197	118	41	0	356	1433
Percent	15.9	56.1	28.0	0.0		16.9	44.6	38.0	0.6		36.6	30.4	33.0	0.0		55.3	33.1	11.5	0.0		
07:45 Volume	14	38	30	0	82	5	24	22	1	52	81	60	68	0	209	52	39	22	0	113	456
Peak Factor																					0.786
High Int.	07:45 AM					07:45 AM					07:45 AM					07:45 AM					
Volume	14	38	30	0	82	5	24	22	1	52	81	60	68	0	209	52	39	22	0	113	
Peak Factor					0.729					0.798					0.804					0.788	

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	MONTEREY RD Southbound					LUCHESSA AVE Westbound					MONTEREY RD Northbound					LUCHESSA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	11	43	8	0	62	18	40	44	0	102	37	60	55	0	152	40	16	9	0	65	381
04:15 PM	18	62	13	0	93	15	25	50	0	90	38	46	59	0	143	32	28	10	0	70	396
04:30 PM	10	50	12	0	72	28	29	59	0	116	43	40	68	0	151	36	36	6	0	78	417
04:45 PM	9	66	15	0	90	16	35	42	0	93	29	49	54	0	132	45	27	7	0	79	394
Total	48	221	48	0	317	77	129	195	0	401	147	195	236	0	578	153	107	32	0	292	1588
05:00 PM	10	70	9	0	89	22	41	77	0	140	31	59	47	0	137	37	18	6	0	61	427
05:15 PM	9	64	6	0	79	20	23	35	0	78	28	53	59	1	141	49	26	8	0	83	381
05:30 PM	9	88	37	0	134	27	3	21	0	51	28	51	80	0	159	52	5	8	0	65	409
05:45 PM	15	104	15	0	134	16	25	22	0	63	18	64	89	0	171	41	8	14	0	63	431
Total	43	326	67	0	436	85	92	155	0	332	105	227	275	1	608	179	57	36	0	272	1648
Grand Total	91	547	115	0	753	162	221	350	0	733	252	422	511	1	1186	332	164	68	0	564	3236
Apprch %	12.1	72.6	15.3	0.0		22.1	30.2	47.7	0.0		21.2	35.6	43.1	0.1		58.9	29.1	12.1	0.0		
Total %	2.8	16.9	3.6	0.0	23.3	5.0	6.8	10.8	0.0	22.7	7.8	13.0	15.8	0.0	36.7	10.3	5.1	2.1	0.0	17.4	

	MONTEREY RD Southbound					LUCHESSA AVE Westbound					MONTEREY RD Northbound					LUCHESSA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	05:00 PM																				
Volume	43	326	67	0	436	85	92	155	0	332	105	227	275	1	608	179	57	36	0	272	1648
Percent	9.9	74.8	15.4	0.0		25.6	27.7	46.7	0.0		17.3	37.3	45.2	0.2		65.8	21.0	13.2	0.0		
05:45 Volume	15	104	15	0	134	16	25	22	0	63	18	64	89	0	171	41	8	14	0	63	431
Peak Factor																					0.956
High Int.	05:30 PM					05:00 PM					05:45 PM					05:15 PM					
Volume	9	88	37	0	134	22	41	77	0	140	18	64	89	0	171	49	26	8	0	83	
Peak Factor					0.813					0.593					0.889					0.819	

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Groups Printed- Unshifted

	PRINCEVALLE AVE Southbound					LUCHESSA AVE Westbound					Northbound					LUCHESSA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	11	0	16	0	27	13	41	0	0	54	0	0	0	0	0	0	40	16	0	56	137
07:15 AM	8	0	19	0	27	12	35	0	0	47	0	0	0	0	0	0	42	8	0	50	124
07:30 AM	18	0	21	0	39	35	63	0	0	98	0	0	0	0	0	0	38	32	0	70	207
07:45 AM	56	0	13	0	69	36	104	0	0	140	0	0	0	0	0	0	73	56	0	129	338
Total	93	0	69	0	162	96	243	0	0	339	0	0	0	0	0	0	193	112	0	305	806
08:00 AM	27	0	17	0	44	18	86	0	0	104	0	0	0	0	0	0	72	17	0	89	237
08:15 AM	19	0	13	0	32	14	39	0	0	53	0	0	0	0	0	0	61	11	0	72	157
08:30 AM	9	0	14	0	23	10	66	0	0	76	0	0	0	0	0	0	38	5	0	43	142
08:45 AM	10	0	13	0	23	13	36	0	0	49	0	0	0	0	0	0	49	2	0	51	123
Total	65	0	57	0	122	55	227	0	0	282	0	0	0	0	0	0	220	35	0	255	659
Grand Total	158	0	126	0	284	151	470	0	0	621	0	0	0	0	0	0	413	147	0	560	1465
Apprch %	55.6	0.0	44.4	0.0		24.3	75.7	0.0	0.0		0.0	0.0	0.0	0.0		0.0	73.8	26.3	0.0		
Total %	10.8	0.0	8.6	0.0	19.4	10.3	32.1	0.0	0.0	42.4	0.0	0.0	0.0	0.0	0.0	0.0	28.2	10.0	0.0	38.2	

	PRINCEVALLE AVE Southbound					LUCHESSA AVE Westbound					Northbound					LUCHESSA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Intersection	07:30 AM																				
Volume	120	0	64	0	184	103	292	0	0	395	0	0	0	0	0	0	244	116	0	360	939
Percent	65.2	0.0	34.8	0.0		26.1	73.9	0.0	0.0		0.0	0.0	0.0	0.0		0.0	67.8	32.2	0.0		
07:45 Volume	56	0	13	0	69	36	104	0	0	140	0	0	0	0	0	0	73	56	0	129	338
Peak Factor																					0.695
High Int.	07:45 AM					07:45 AM					6:45:00 AM					07:45 AM					
Volume	56	0	13	0	69	36	104	0	0	140	0	0	0	0	0	0	73	56	0	129	
Peak Factor					0.667					0.705										0.698	

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	PRINCEVALLE AVE Southbound					LUCHESSA AVE Westbound					Northbound					LUCHESSA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	7	0	15	0	22	22	61	0	0	83	0	0	0	0	0	0	39	17	0	56	161
04:15 PM	13	0	13	0	26	27	55	0	0	82	0	0	0	0	0	0	55	10	0	65	173
04:30 PM	13	0	12	0	25	32	57	0	0	89	0	0	0	0	0	0	67	12	0	79	193
04:45 PM	20	0	15	0	35	27	53	0	0	80	0	0	0	0	0	0	52	12	0	64	179
Total	53	0	55	0	108	108	226	0	0	334	0	0	0	0	0	0	213	51	0	264	706
05:00 PM	23	0	18	0	41	30	55	0	0	85	0	0	0	0	0	0	50	12	0	62	188
05:15 PM	11	0	24	0	35	19	62	1	0	82	0	0	0	0	0	0	49	18	0	67	184
05:30 PM	10	0	12	0	22	27	44	0	0	71	0	0	0	0	0	0	38	11	0	49	142
05:45 PM	18	0	13	0	31	24	75	0	0	99	0	0	0	0	0	0	40	8	0	48	178
Total	62	0	67	0	129	100	236	1	0	337	0	0	0	0	0	0	177	49	0	226	692
Grand Total	115	0	122	0	237	208	462	1	0	671	0	0	0	0	0	0	390	100	0	490	1398
Apprch %	48.5	0.0	51.5	0.0		31.0	68.9	0.1	0.0		0.0	0.0	0.0	0.0		0.0	79.6	20.4	0.0		
Total %	8.2	0.0	8.7	0.0	17.0	14.9	33.0	0.1	0.0	48.0	0.0	0.0	0.0	0.0	0.0	0.0	27.9	7.2	0.0	35.1	

	PRINCEVALLE AVE Southbound					LUCHESSA AVE Westbound					Northbound					LUCHESSA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:30 PM																				
Volume	67	0	69	0	136	108	227	1	0	336	0	0	0	0	0	0	218	54	0	272	744
Percent	49.3	0.0	50.7	0.0		32.1	67.6	0.3	0.0		0.0	0.0	0.0	0.0		0.0	80.1	19.9	0.0		
04:30 Volume	13	0	12	0	25	32	57	0	0	89	0	0	0	0	0	0	67	12	0	79	193
Peak Factor																					0.964
High Int.	05:00 PM					04:30 PM					3:45:00 PM					04:30 PM					
Volume	23	0	18	0	41	32	57	0	0	89	0	0	0	0	0	0	67	12	0	79	
Peak Factor					0.829					0.944										0.861	

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	Southbound					LUCHESSA AVE Westbound					THOMAS RD Northbound					LUCHESSA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	0	0	0	0	0	0	7	44	0	51	42	0	0	0	42	4	14	0	0	18	111
07:15 AM	0	0	0	0	0	0	2	43	0	45	39	0	1	0	40	1	10	0	0	11	96
07:30 AM	0	0	0	0	0	0	4	77	0	81	60	0	2	0	62	5	9	0	0	14	157
07:45 AM	0	0	0	0	0	0	5	152	0	157	113	0	0	0	113	5	16	0	0	21	291
Total	0	0	0	0	0	0	18	316	0	334	254	0	3	0	257	15	49	0	0	64	655
08:00 AM	0	0	0	0	0	0	4	113	0	117	87	0	3	0	90	4	4	0	0	8	215
08:15 AM	0	0	0	0	0	0	3	58	0	61	62	0	3	0	65	0	10	0	0	10	136
08:30 AM	0	0	0	0	0	0	4	69	0	73	38	0	1	0	39	1	5	0	0	6	118
08:45 AM	0	0	0	0	0	0	2	47	0	49	46	0	0	0	46	0	6	0	0	6	101
Total	0	0	0	0	0	0	13	287	0	300	233	0	7	0	240	5	25	0	0	30	570
Grand Total	0	0	0	0	0	0	31	603	0	634	487	0	10	0	497	20	74	0	0	94	1225
Apprch %	0.0	0.0	0.0	0.0		0.0	4.9	95.1	0.0		98.0	0.0	2.0	0.0		21.3	78.7	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	2.5	49.2	0.0	51.8	39.8	0.0	0.8	0.0	40.6	1.6	6.0	0.0	0.0	7.7	

	Southbound					LUCHESSA AVE Westbound					THOMAS RD Northbound					LUCHESSA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Intersection	07:30 AM																				
Volume	0	0	0	0	0	0	16	400	0	416	322	0	8	0	330	14	39	0	0	53	799
Percent	0.0	0.0	0.0	0.0		0.0	3.8	96.2	0.0		97.6	0.0	2.4	0.0		26.4	73.6	0.0	0.0		
07:45 Volume	0	0	0	0	0	0	5	152	0	157	113	0	0	0	113	5	16	0	0	21	291
Peak Factor																					0.686
High Int.	6:45:00 AM					07:45 AM					07:45 AM					07:45 AM					
Volume	0	0	0	0	0	0	5	152	0	157	113	0	0	0	113	5	16	0	0	21	
Peak Factor										0.662					0.730					0.631	

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	Southbound					LUCHESSA AVE Westbound					THOMAS RD Northbound					LUCHESSA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	0	0	0	0	0	11	55	0	66	54	0	1	0	55	2	3	0	0	5	126
04:15 PM	0	0	0	0	0	0	12	60	0	72	55	0	0	0	55	2	10	0	0	12	139
04:30 PM	0	0	0	0	0	0	6	71	0	77	64	0	4	0	68	0	11	0	0	11	156
04:45 PM	0	0	0	0	0	0	10	59	0	69	62	0	0	0	62	1	3	0	0	4	135
Total	0	0	0	0	0	0	39	245	0	284	235	0	5	0	240	5	27	0	0	32	556
05:00 PM	0	0	0	0	0	0	12	69	0	81	52	0	5	0	57	2	9	0	0	11	149
05:15 PM	0	0	0	0	0	0	10	67	0	77	61	0	2	0	63	2	7	0	0	9	149
05:30 PM	0	0	0	0	0	0	4	43	0	47	47	0	0	0	47	2	4	0	0	6	100
05:45 PM	0	0	0	0	0	0	9	88	0	97	42	0	1	0	43	2	3	0	0	5	145
Total	0	0	0	0	0	0	35	267	0	302	202	0	8	0	210	8	23	0	0	31	543
Grand Total	0	0	0	0	0	0	74	512	0	586	437	0	13	0	450	13	50	0	0	63	1099
Apprch %	0.0	0.0	0.0	0.0		0.0	12.6	87.4	0.0		97.1	0.0	2.9	0.0		20.6	79.4	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	6.7	46.6	0.0	53.3	39.8	0.0	1.2	0.0	40.9	1.2	4.5	0.0	0.0	5.7	

	Southbound					LUCHESSA AVE Westbound					THOMAS RD Northbound					LUCHESSA AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:30 PM																				
Volume	0	0	0	0	0	0	38	268	0	304	239	0	11	0	250	5	30	0	0	35	589
Percent	0.0	0.0	0.0	0.0		0.0	12.5	87.5	0.0		95.6	0.0	4.4	0.0		14.3	85.7	0.0	0.0		
04:30 Volume	0	0	0	0	0	0	6	71	0	77	64	0	4	0	68	0	11	0	0	11	156
Peak Factor																					0.944
High Int.	3:45:00 PM					05:00 PM					04:30 PM					04:30 PM					
Volume	0	0	0	0	0	0	12	69	0	81	64	0	4	0	68	0	11	0	0	11	
Peak Factor										0.938					0.919					0.795	

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	MONTEREY RD Southbound					TENTH ST Westbound					MONTEREY RD Northbound					TENTH ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	2	15	9	0	26	13	59	15	0	87	14	21	21	0	56	37	97	5	0	139	308
07:15 AM	4	15	14	0	33	13	71	7	0	91	11	32	17	0	60	25	82	4	0	111	295
07:30 AM	14	23	15	0	52	17	132	8	0	157	7	31	27	0	65	38	130	19	0	187	461
07:45 AM	12	30	35	0	77	18	121	9	0	148	8	27	35	0	70	46	159	18	0	223	518
Total	32	83	73	0	188	61	383	39	0	483	40	111	100	0	251	146	468	46	0	660	1582
08:00 AM	7	30	16	0	53	17	79	5	0	101	8	22	22	0	52	16	125	10	0	151	357
08:15 AM	9	18	28	0	55	13	55	7	0	75	10	30	23	0	63	20	101	4	0	125	318
08:30 AM	10	23	17	0	50	21	53	11	0	85	6	20	18	0	44	22	87	5	0	114	293
08:45 AM	5	21	19	0	45	19	44	5	0	68	13	34	12	0	59	7	92	5	0	104	276
Total	31	92	80	0	203	70	231	28	0	329	37	106	75	0	218	65	405	24	0	494	1244
Grand Total	63	175	153	0	391	131	614	67	0	812	77	217	175	0	469	211	873	70	0	1154	2826
Apprch %	16.1	44.8	39.1	0.0		16.1	75.6	8.3	0.0		16.4	46.3	37.3	0.0		18.3	75.6	6.1	0.0		
Total %	2.2	6.2	5.4	0.0	13.8	4.6	21.7	2.4	0.0	28.7	2.7	7.7	6.2	0.0	16.6	7.5	30.9	2.5	0.0	40.8	

	MONTEREY RD Southbound					TENTH ST Westbound					MONTEREY RD Northbound					TENTH ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Intersection	07:30 AM																				
Volume	42	101	94	0	237	65	387	29	0	481	33	110	107	0	250	120	515	51	0	686	1654
Percent	17.7	42.6	39.7	0.0		13.5	80.5	6.0	0.0		13.2	44.0	42.8	0.0		17.5	75.1	7.4	0.0		
07:45 Volume	12	30	35	0	77	18	121	9	0	148	8	27	35	0	70	46	159	18	0	223	518
Peak Factor																					0.798
High Int.	07:45 AM					07:30 AM					07:45 AM					07:45 AM					
Volume	12	30	35	0	77	17	132	8	0	157	8	27	35	0	70	46	159	18	0	223	
Peak Factor					0.769					0.766					0.893					0.769	

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	MONTEREY RD Southbound					TENTH ST Westbound					MONTEREY RD Northbound					TENTH ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	13	44	54	0	111	58	141	19	0	218	18	31	30	0	79	21	108	7	0	136	544
04:15 PM	13	38	36	0	87	49	166	21	0	236	25	37	29	0	91	31	96	13	0	140	554
04:30 PM	15	47	55	0	117	53	162	12	0	227	14	56	23	0	93	22	108	7	0	137	574
04:45 PM	12	48	30	0	90	37	167	11	0	215	13	36	31	0	80	25	117	4	0	146	531
Total	53	177	175	0	405	197	636	63	0	896	70	160	113	0	343	99	429	31	0	559	2203
05:00 PM	13	49	40	0	102	35	171	16	0	222	18	45	43	0	106	30	153	12	0	195	625
05:15 PM	22	37	28	0	87	41	197	10	0	248	21	47	31	0	99	22	134	7	0	163	597
05:30 PM	28	63	0	0	91	8	2	1	0	11	13	74	23	0	110	32	6	10	0	48	260
05:45 PM	32	84	30	0	146	26	123	16	0	165	18	43	28	0	89	22	107	17	0	146	546
Total	95	233	98	0	426	110	493	43	0	646	70	209	125	0	404	106	400	46	0	552	2028
Grand Total	148	410	273	0	831	307	1129	106	0	1542	140	369	238	0	747	205	829	77	0	1111	4231
Apprch %	17.8	49.3	32.9	0.0		19.9	73.2	6.9	0.0		18.7	49.4	31.9	0.0		18.5	74.6	6.9	0.0		
Total %	3.5	9.7	6.5	0.0	19.6	7.3	26.7	2.5	0.0	36.4	3.3	8.7	5.6	0.0	17.7	4.8	19.6	1.8	0.0	26.3	

	MONTEREY RD Southbound					TENTH ST Westbound					MONTEREY RD Northbound					TENTH ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:30 PM																				
Volume	62	181	153	0	396	166	697	49	0	912	66	184	128	0	378	99	512	30	0	641	2327
Percent	15.7	45.7	38.6	0.0		18.2	76.4	5.4	0.0		17.5	48.7	33.9	0.0		15.4	79.9	4.7	0.0		
05:00 Volume	13	49	40	0	102	35	171	16	0	222	18	45	43	0	106	30	153	12	0	195	625
Peak Factor																					0.931
High int.	04:30 PM					05:15 PM					05:00 PM					05:00 PM					
Volume	15	47	55	0	117	41	197	10	0	248	18	45	43	0	106	30	153	12	0	195	
Peak Factor					0.846					0.919					0.892					0.822	

APPENDIX B:
LOS CALCULATIONS

Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

Intersection		ExistAM LOS	ExistAM Avg Del (sec)	ExistAM Crit V/C	ExistAM Avg Crit Del (sec)	BackAM LOS	BackAM Avg Del (sec)	BackAM Crit V/C	BackAM Avg Crit Del (sec)	ProjAM LOS	ProjAM Avg Del (sec)	ProjAM Crit V/C	ProjAM Crit V/C Change	ProjAM Avg Crit Del (sec)	ProjAM Avg Crit Del Change	CumlAM LOS	CumlAM Avg Del (sec)	CumlAM Crit V/C	CumlAM Avg Crit Del (sec)
#1	Luchessa Avenue / Thomas Road	B	12.6	0.596	12.6	B	14.4	0.655	14.4	C	15.6	0.698	+ 0.042	15.6	+ 1.2	F	99.2	1.341	99.2
#2	Luchessa Avenue / Princevalle Street	C	4.3	0.000	4.3	C	4.3	0.000	4.3	C	4.5	0.000	+ 0.000	4.5	+ 0.2	F	8.5	0.000	8.5
#3	Monterey Street / Luchessa Avenue	C	23.9	0.466	24.4	C	24.6	0.511	25.5	C	26.7	0.580	+ 0.069	29.0	+ 3.5	D	34.6	0.752	42.6
#4	Monterey Street / Tenth Street	B	15.1	0.306	15.3	B-	17.8	0.499	19.3	C+	18.3	0.513	+ 0.014	20.0	+ 0.7	C	22.4	0.721	25.7

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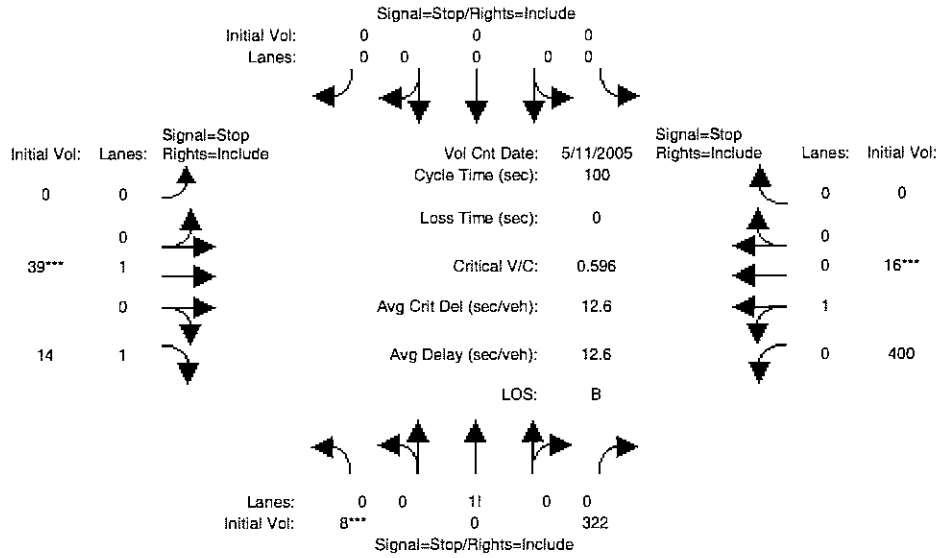
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
ExistAM

Intersection #1: Luchessa Avenue / Thomas Road



Street Name:	Thomas Road						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	8	0	322	0	0	0	0	39	14	400	16	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	0	322	0	0	0	0	39	14	400	16	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	0	322	0	0	0	0	39	14	400	16	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	0	322	0	0	0	0	39	14	400	16	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	0	322	0	0	0	0	39	14	400	16	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	0	322	0	0	0	0	39	14	400	16	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.00	0.98	0.00	0.00	0.00	0.00	1.00	1.00	0.96	0.04	0.00
Final Sat.:	18	0	743	0	0	0	0	592	670	671	27	0
Capacity Analysis Module:												
Vol/Sat:	0.43	xxxx	0.43	xxxx	xxxx	xxxx	xxxx	0.07	0.02	0.60	0.60	xxxx
Crit Moves:	****							****			****	
Delay/Veh:	10.6	0.0	10.6	0.0	0.0	0.0	0.0	8.8	7.8	14.7	14.7	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.6	0.0	10.6	0.0	0.0	0.0	0.0	8.8	7.8	14.7	14.7	0.0
LOS by Move:	B	*	B	*	*	*	*	A	A	B	B	*
ApproachDel:		10.6			xxxxxx			8.5			14.7	
Delay Adj:		1.00			xxxxx			1.00			1.00	
ApprAdjDel:		10.6			xxxxxx			8.5			14.7	
LOS by Appr:		B			*			A			B	

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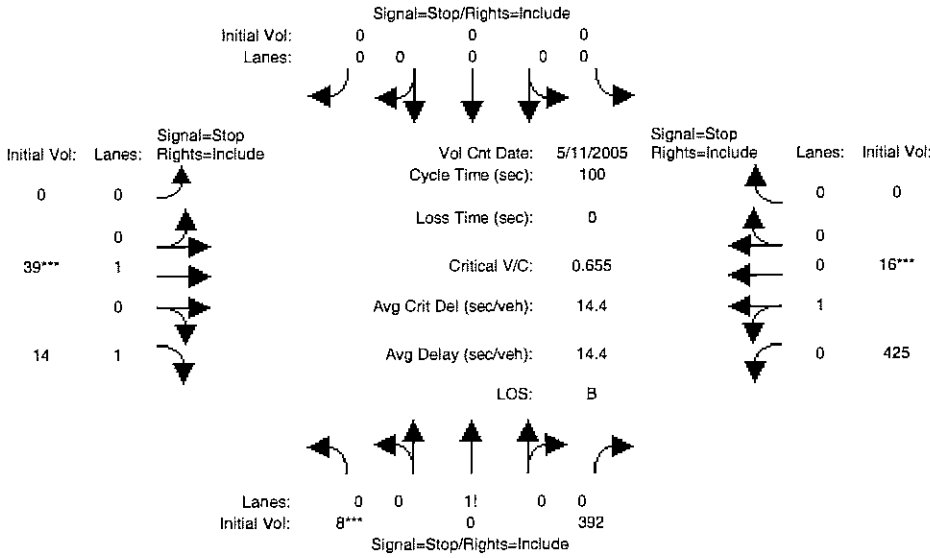
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
BackAM

Intersection #1: Luchessa Avenue / Thomas Road



Street Name:	Thomas Road						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	8	0	322	0	0	0	0	39	14	400	16	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	0	322	0	0	0	0	39	14	400	16	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
App trips:	0	0	70	0	0	0	0	0	0	25	0	0
Initial Fut:	8	0	392	0	0	0	0	39	14	425	16	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	0	392	0	0	0	0	39	14	425	16	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	0	392	0	0	0	0	39	14	425	16	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	0	392	0	0	0	0	39	14	425	16	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.00	0.98	0.00	0.00	0.00	0.00	1.00	1.00	0.96	0.04	0.00
Final Sat.:	15	0	735	0	0	0	0	561	629	649	24	0
Capacity Analysis Module:												
Vol/Sat:	0.53	xxxx	0.53	xxxx	xxxx	xxxx	xxxx	0.07	0.02	0.66	0.66	xxxx
Crit Moves:	****							****			****	
Delay/Veh:	12.2	0.0	12.2	0.0	0.0	0.0	0.0	9.1	8.1	17.0	17.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.2	0.0	12.2	0.0	0.0	0.0	0.0	9.1	8.1	17.0	17.0	0.0
LOS by Move:	B	*	B	*	*	*	*	A	A	C	C	*
ApproachDel:		12.2			xxxxxx			8.8			17.0	
Delay Adj:		1.00			xxxxx			1.00			1.00	
ApprAdjDel:		12.2			xxxxxx			8.8			17.0	
LOS by Appr:		B			*			A			C	

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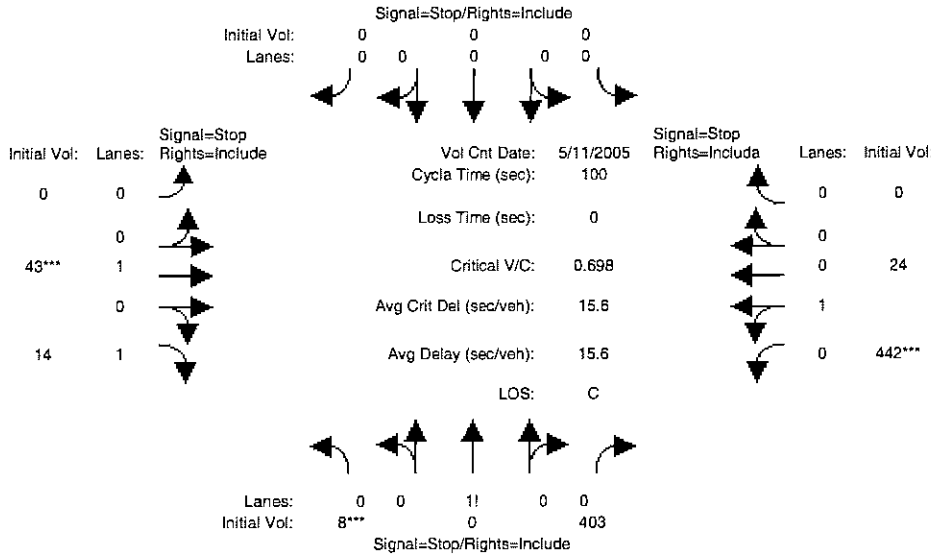
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
ProjAM

Intersection #1: Luchessa Avenue / Thomas Road



Street Name:	Thomas Road						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	8	0	322	0	0	0	0	39	14	400	16	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	0	322	0	0	0	0	39	14	400	16	0
Added Vol:	0	0	11	0	0	0	0	4	0	17	8	0
App trips:	0	0	70	0	0	0	0	0	0	25	0	0
Initial Fut:	8	0	403	0	0	0	0	43	14	442	24	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	8	0	403	0	0	0	0	43	14	442	24	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	0	403	0	0	0	0	43	14	442	24	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	8	0	403	0	0	0	0	43	14	442	24	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.00	0.98	0.00	0.00	0.00	0.00	1.00	1.00	0.95	0.05	0.00
Final Sat.:	14	0	722	0	0	0	0	552	618	634	34	0
Capacity Analysis Module:												
Vol/Sat:	0.56	xxxx	0.56	xxxx	xxxx	xxxx	xxxx	0.08	0.02	0.70	0.70	xxxx
Crit Moves:	****							****		****		
Delay/Veh:	12.9	0.0	12.9	0.0	0.0	0.0	0.0	9.2	8.2	18.7	18.7	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.9	0.0	12.9	0.0	0.0	0.0	0.0	9.2	8.2	18.7	18.7	0.0
LOS by Move:	B	*	B	*	*	*	*	A	A	C	C	*
ApproachDel:	12.9			xxxxxx			8.9			18.7		
Delay Adj:	1.00			xxxxx			1.00			1.00		
ApprAdjDel:	12.9			xxxxxx			8.9			18.7		
LOS by Appr:	B			*			A			C		

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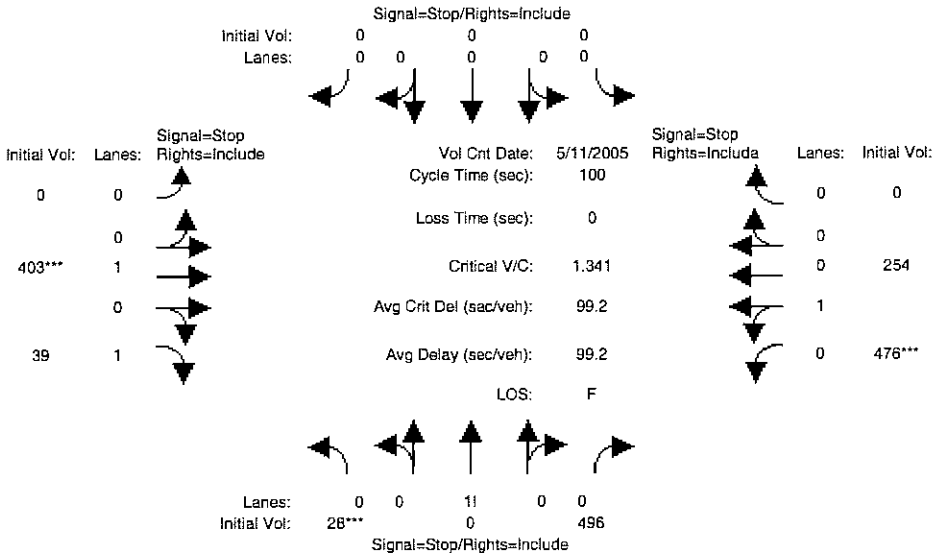
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
CumAM

Intersection #1: Luchessa Avenue / Thomas Road



Street Name:	Thomas Road						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	8	0	322	0	0	0	0	39	14	400	16	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	0	322	0	0	0	0	39	14	400	16	0
Added Vol:	0	0	11	0	0	0	0	4	0	17	8	0
App trips+P:	20	0	163	0	0	0	0	360	25	59	230	0
Initial Fut:	28	0	496	0	0	0	0	403	39	476	254	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	0	496	0	0	0	0	403	39	476	254	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	0	496	0	0	0	0	403	39	476	254	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	28	0	496	0	0	0	0	403	39	476	254	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.05	0.00	0.95	0.00	0.00	0.00	0.00	1.00	1.00	0.65	0.35	0.00
Final Sat.:	32	0	564	0	0	0	0	500	553	355	189	0
Capacity Analysis Module:												
Vol/Sat:	0.88	xxxx	0.88	xxxx	xxxx	xxxx	xxxx	0.81	0.07	1.34	1.34	xxxx
Crit Moves:	****							****		****		
Delay/Veh:	37.1	0.0	37.1	0.0	0.0	0.0	0.0	32.5	9.6	185.5	186	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.1	0.0	37.1	0.0	0.0	0.0	0.0	32.5	9.6	185.5	186	0.0
LOS by Move:	E	*	E	*	*	*	*	D	A	F	F	*
ApproachDel:	37.1			xxxxxx			30.5			185.5		
Delay Adj:	1.00			xxxxx			1.00			1.00		
ApprAdjDel:	37.1			xxxxxx			30.5			185.5		
LOS by Appr:	E			*			D			F		

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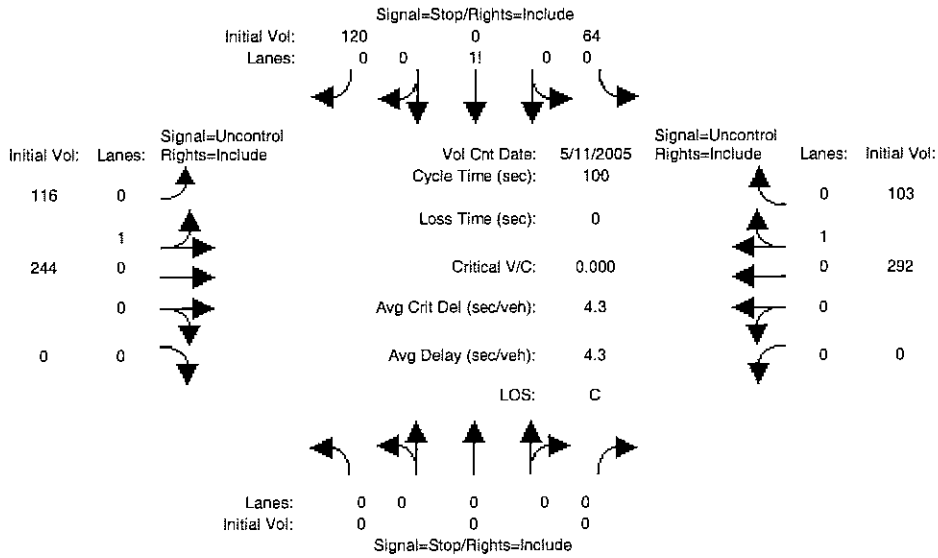
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
ExistAM

Intersection #2: Luchessa Avenue / Princevalle Street



Street Name:	Princevalle Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	0	0	0	64	0	120	116	244	0	0	292	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	64	0	120	116	244	0	0	292	103
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	64	0	120	116	244	0	0	292	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	64	0	120	116	244	0	0	292	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	64	0	120	116	244	0	0	292	103
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	820	xxxx	344	395	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	348	xxxx	704	1175	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	320	xxxx	704	1175	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.20	xxxx	0.17	0.10	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	496	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.7	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	16.5	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			16.5			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	64	0	120	116	244	0	0	292	103
ApproachDel:	xxxxxx			16.5			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.8]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=184]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=939]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	64	0	120	116	244	0	0	292	103

Major Street Volume: 755
Minor Approach Volume: 184
Minor Approach Volume Threshold: 294

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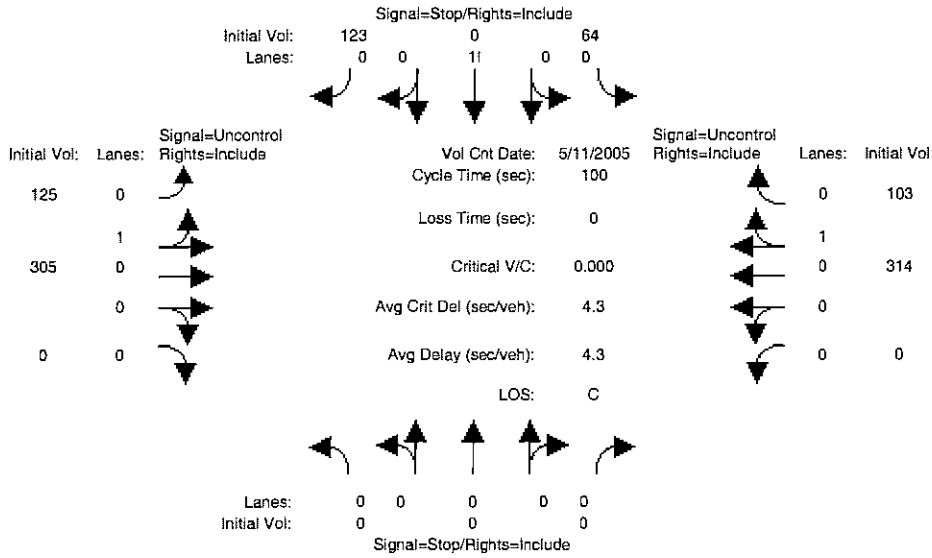
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BackAM

Intersection #2: Luchessa Avenue / Princevalle Street



Street Name:	Princevalle Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	0	0	0	64	0	120	116	244	0	0	292	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	64	0	120	116	244	0	0	292	103
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
App trips:	0	0	0	0	0	3	9	61	0	0	22	0
Initial Fut:	0	0	0	64	0	123	125	305	0	0	314	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	64	0	123	125	305	0	0	314	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	64	0	123	125	305	0	0	314	103
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	921	xxxx	366	417	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	303	xxxx	684	1153	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	276	xxxx	684	1153	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.23	xxxx	0.18	0.11	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	454	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	2.0	xxxxx	0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	18.4	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			18.4			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	64	0	123	125	305	0	0	314	103
ApproachDel:	xxxxxx			18.4			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=1.0]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=187]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1034]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	64	0	123	125	305	0	0	314	103

Major Street Volume: 847
Minor Approach Volume: 187
Minor Approach Volume Threshold: 264

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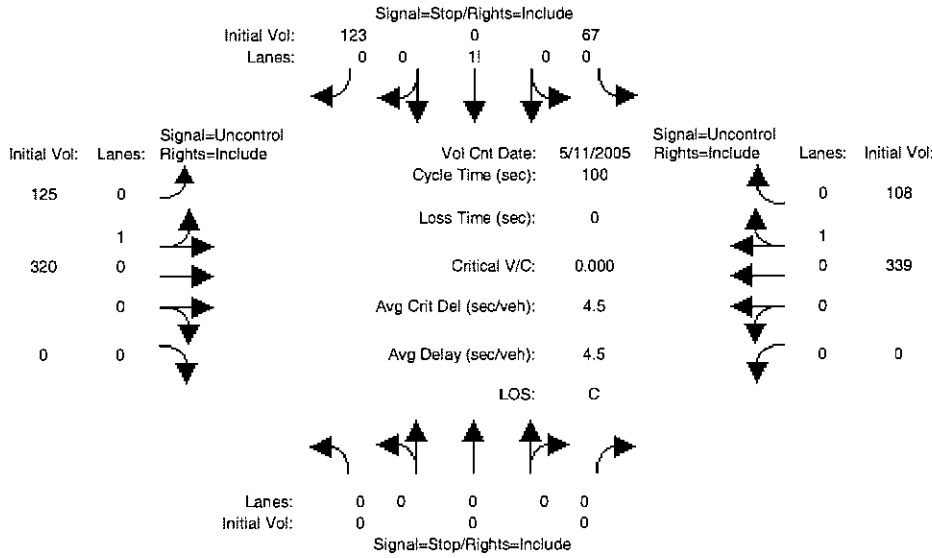
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
ProjAM

Intersection #2: Luchessa Avenue / Princevalle Street



Street Name:	Princevalle Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	0	0	0	64	0	120	116	244	0	0	292	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	64	0	120	116	244	0	0	292	103
Added Vol:	0	0	0	3	0	0	0	15	0	0	25	5
App trips:	0	0	0	0	0	3	9	61	0	0	22	0
Initial Fut:	0	0	0	67	0	123	125	320	0	0	339	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	67	0	123	125	320	0	0	339	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	67	0	123	125	320	0	0	339	108
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	963	xxxx	393	447	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	286	xxxx	660	1124	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	260	xxxx	660	1124	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.26	xxxx	0.19	0.11	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	428	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	2.2	xxxxx	0.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	20.0	xxxxx	8.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			20.0			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	67	0	123	125	320	0	0	339	108
ApproachDel:	xxxxxx			20.0			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=1.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=190]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1082]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	67	0	123	125	320	0	0	339	108

Major Street Volume: 892
Minor Approach Volume: 190
Minor Approach Volume Threshold: 250

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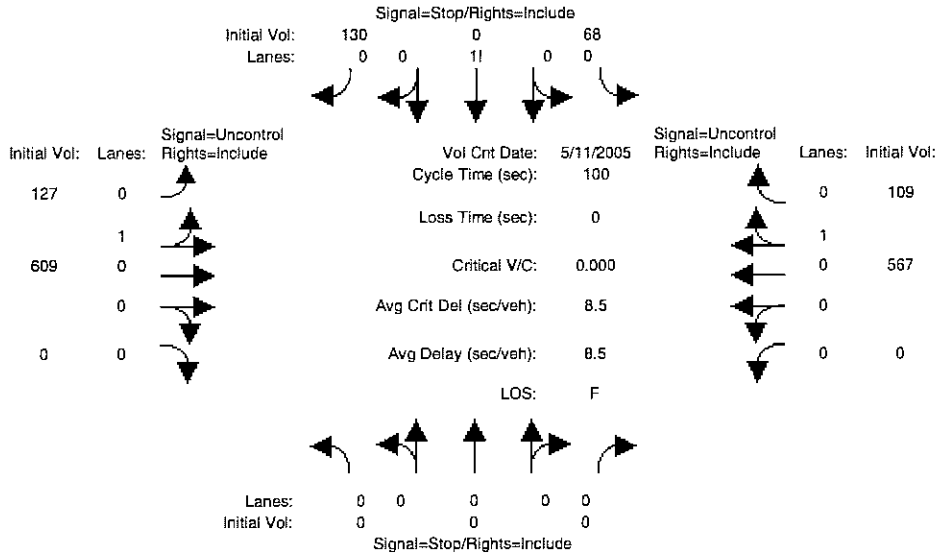
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CumAM

Intersection #2: Luchessa Avenue / Princevalle Street



Street Name:	Princevalle Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	0	0	0	64	0	120	116	244	0	0	292	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	64	0	120	116	244	0	0	292	103
Added Vol:	0	0	0	3	0	0	0	15	0	0	25	5
App trips+P:	0	0	0	1	0	10	11	350	0	0	250	1
Initial Fut:	0	0	0	68	0	130	127	609	0	0	567	109
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	68	0	130	127	609	0	0	567	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	68	0	130	127	609	0	0	567	109
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1485	xxxx	622	676	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	139	xxxx	491	925	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	123	xxxx	491	925	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.55	xxxx	0.26	0.14	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	242	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	6.3	xxxxx	0.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	63.4	xxxxx	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			63.4			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	68	0	130	127	609	0	0	567	109
ApproachDel:	xxxxxx			63.4			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=3.5]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=198]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1610]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	68	0	130	127	609	0	0	567	109

Major Street Volume: 1412
Minor Approach Volume: 198
Minor Approach Volume Threshold: 127

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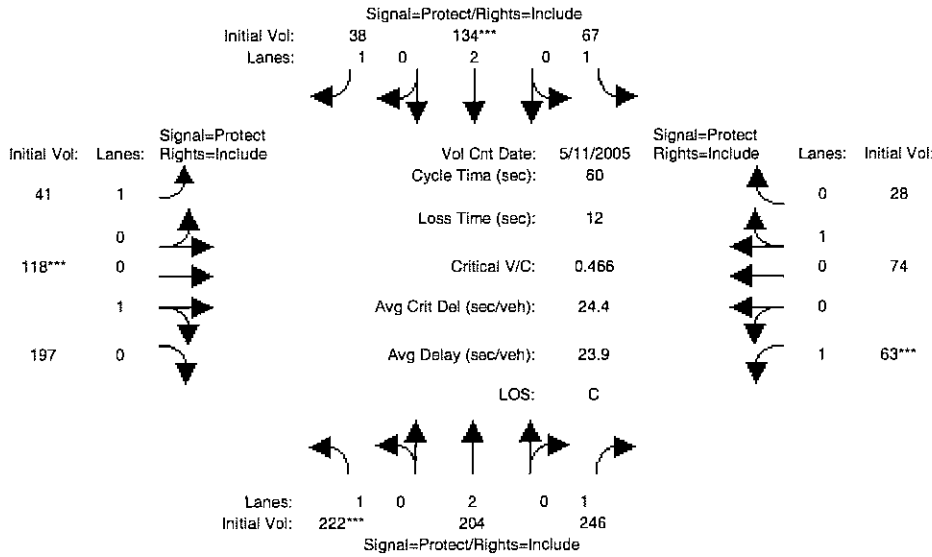
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
ExistAM

Intersection #3: Monterey Street / Luchessa Avenue



Street Name:	Monterey Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	222	204	246	67	134	38	41	118	197	63	74	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222	204	246	67	134	38	41	118	197	63	74	28
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	222	204	246	67	134	38	41	118	197	63	74	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	222	204	246	67	134	38	41	118	197	63	74	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	222	204	246	67	134	38	41	118	197	63	74	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	222	204	246	67	134	38	41	118	197	63	74	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.37	0.63	1.00	0.73	0.27
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	674	1126	1750	1306	494
Capacity Analysis Module:												
Vol/Sat:	0.13	0.05	0.14	0.04	0.04	0.02	0.02	0.18	0.18	0.04	0.06	0.06
Crit Moves:	****				****			****		****		
Green Time:	13.0	13.5	13.5	9.5	10.0	10.0	10.3	18.0	18.0	7.0	14.7	14.7
Volume/Cap:	0.58	0.24	0.62	0.24	0.21	0.13	0.14	0.58	0.58	0.31	0.23	0.23
Uniform Del:	21.1	19.0	20.9	22.1	21.6	21.3	21.1	17.8	17.8	24.3	18.1	18.1
IncremntDel:	6.4	0.7	7.2	2.1	0.8	0.9	0.9	4.6	4.6	3.9	1.2	1.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	27.5	19.7	28.1	24.2	22.4	22.2	22.0	22.4	22.4	28.2	19.4	19.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.5	19.7	28.1	24.2	22.4	22.2	22.0	22.4	22.4	28.2	19.4	19.4
HCM2k95th:	9	4	10	3	3	2	2	11	11	3	4	4

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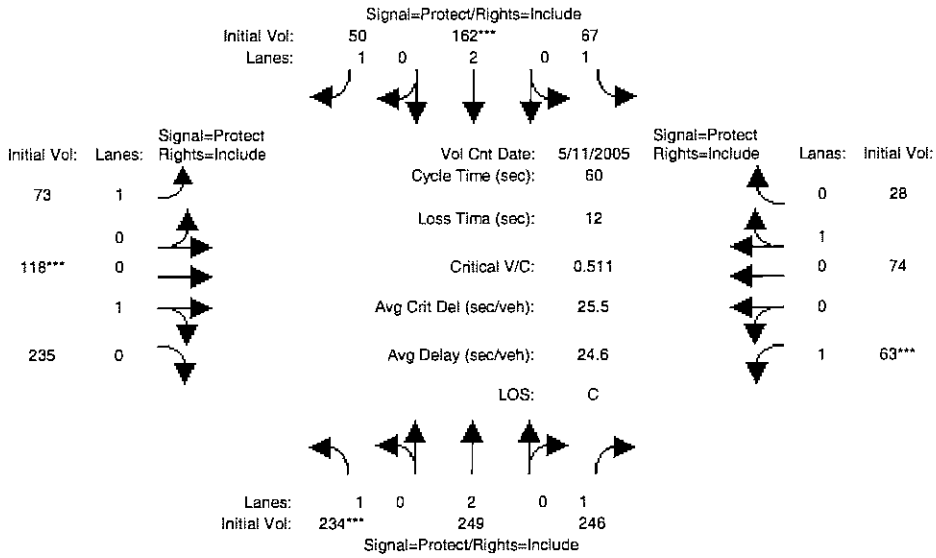
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
BackAM

Intersection #3: Monterey Street / Luchessa Avenue



Street Name:	Monterey Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	222	204	246	67	134	38	41	118	197	63	74	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222	204	246	67	134	38	41	118	197	63	74	28
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
App trips:	12	45	0	0	28	12	32	0	38	0	0	0
Initial Fut:	234	249	246	67	162	50	73	118	235	63	74	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	234	249	246	67	162	50	73	118	235	63	74	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	234	249	246	67	162	50	73	118	235	63	74	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	234	249	246	67	162	50	73	118	235	63	74	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.33	0.67	1.00	0.73	0.27
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	602	1198	1750	1306	494
Capacity Analysis Module:												
Vol/Sat:	0.13	0.07	0.14	0.04	0.04	0.03	0.04	0.20	0.20	0.04	0.06	0.06
Crit Moves:	****				****			****		****		
Green Time:	12.6	13.3	13.3	9.3	10.0	10.0	10.5	18.4	18.4	7.0	15.0	15.0
Volume/Cap:	0.64	0.30	0.64	0.25	0.26	0.17	0.24	0.64	0.64	0.31	0.23	0.23
Uniform Del:	21.6	19.5	21.2	22.3	21.8	21.4	21.3	17.9	17.9	24.3	17.9	17.9
IncremntDel:	8.3	0.9	7.7	2.2	1.0	1.3	1.8	5.6	5.6	3.9	1.2	1.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	29.9	20.4	28.9	24.4	22.7	22.7	23.2	23.5	23.5	28.2	19.1	19.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.9	20.4	28.9	24.4	22.7	22.7	23.2	23.5	23.5	28.2	19.1	19.1
HCM2k95th:	10	5	10	3	4	2	3	13	13	3	4	4

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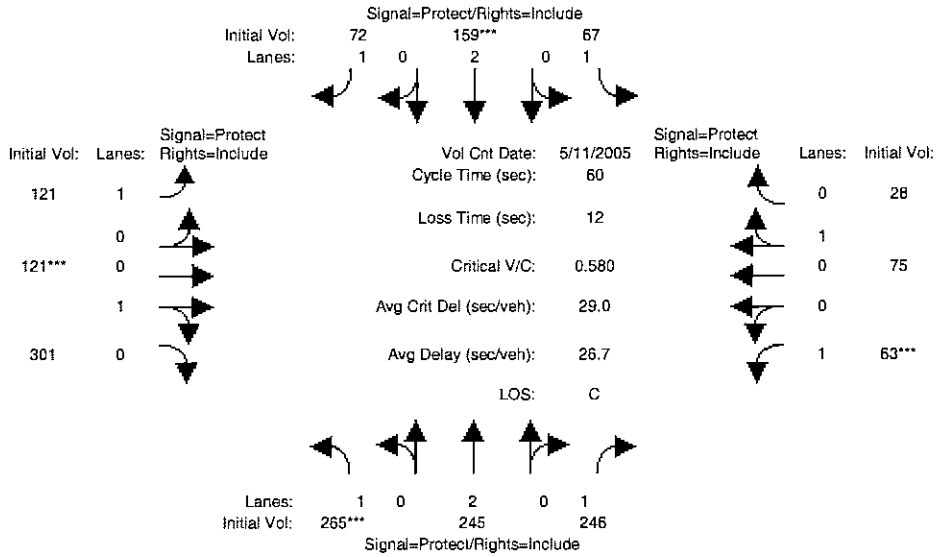
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
ProjAM

Intersection #3: Monterey Street / Luchessa Avenue



Street Name:	Monterey Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	222	204	246	67	134	38	41	118	197	63	74	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222	204	246	67	134	38	41	118	197	63	74	28
Added Vol:	27	0	0	0	0	19	44	3	63	0	1	0
App trips+P:	16	41	0	0	25	15	36	0	41	0	0	0
Initial Fut:	265	245	246	67	159	72	121	121	301	63	75	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	265	245	246	67	159	72	121	121	301	63	75	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	265	245	246	67	159	72	121	121	301	63	75	28
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	265	245	246	67	159	72	121	121	301	63	75	28
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.29	0.71	1.00	0.73	0.27
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	516	1284	1750	1311	489
Capacity Analysis Module:												
Vol/Sat:	0.15	0.06	0.14	0.04	0.04	0.04	0.07	0.23	0.23	0.04	0.06	0.06
Crit Moves:	****				****			****		****		
Green Time:	12.2	13.0	13.0	9.1	10.0	10.0	10.6	18.8	18.8	7.0	15.2	15.2
Volume/Cap:	0.75	0.30	0.65	0.25	0.25	0.25	0.39	0.75	0.75	0.31	0.23	0.23
Delay/Veh:	35.9	20.6	29.6	24.7	22.7	23.7	25.5	27.2	27.2	28.2	18.9	18.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.9	20.6	29.6	24.7	22.7	23.7	25.5	27.2	27.2	28.2	18.9	18.9
HCM2k95th:	12	5	10	3	3	3	5	16	16	3	4	4

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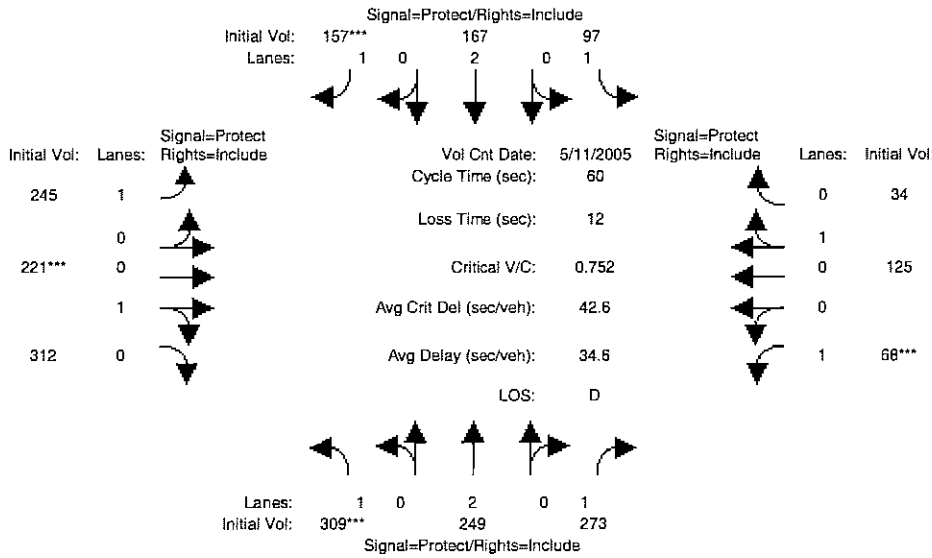
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
CumlAM

Intersection #3: Monterey Street / Luchessa Avenue



Street Name:	Monterey Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	222	204	246	67	134	38	41	118	197	63	74	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222	204	246	67	134	38	41	118	197	63	74	28
Added Vol:	27	0	0	0	0	19	44	3	63	0	1	0
App trips+P:	60	45	27	30	33	100	160	100	52	5	50	6
Initial Fut:	309	249	273	97	167	157	245	221	312	68	125	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	309	249	273	97	167	157	245	221	312	68	125	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	309	249	273	97	167	157	245	221	312	68	125	34
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	309	249	273	97	167	157	245	221	312	68	125	34
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.41	0.59	1.00	0.79	0.21
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	746	1054	1750	1415	385
Capacity Analysis Module:												
Vol/Sat:	0.18	0.07	0.16	0.06	0.04	0.09	0.14	0.30	0.30	0.04	0.09	0.09
Crit Moves:	****					****		****		****		
Green Time:	11.6	12.7	12.7	8.9	10.0	10.0	12.1	19.4	19.4	7.0	14.4	14.4
Volume/Cap:	0.91	0.31	0.74	0.37	0.26	0.54	0.70	0.91	0.91	0.33	0.37	0.37
Uniform Del:	23.7	20.0	22.1	23.0	21.8	22.9	22.3	19.5	19.5	24.4	19.0	19.0
IncremntDel:	31.5	1.0	12.4	4.1	1.0	7.0	10.9	21.3	21.3	4.3	2.4	2.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	55.2	21.0	34.5	27.1	22.8	29.8	33.1	40.8	40.8	28.7	21.5	21.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.2	21.0	34.5	27.1	22.8	29.8	33.1	40.8	40.8	28.7	21.5	21.5
HCM2k95th:	17	5	12	5	4	7	11	24	24	4	6	6

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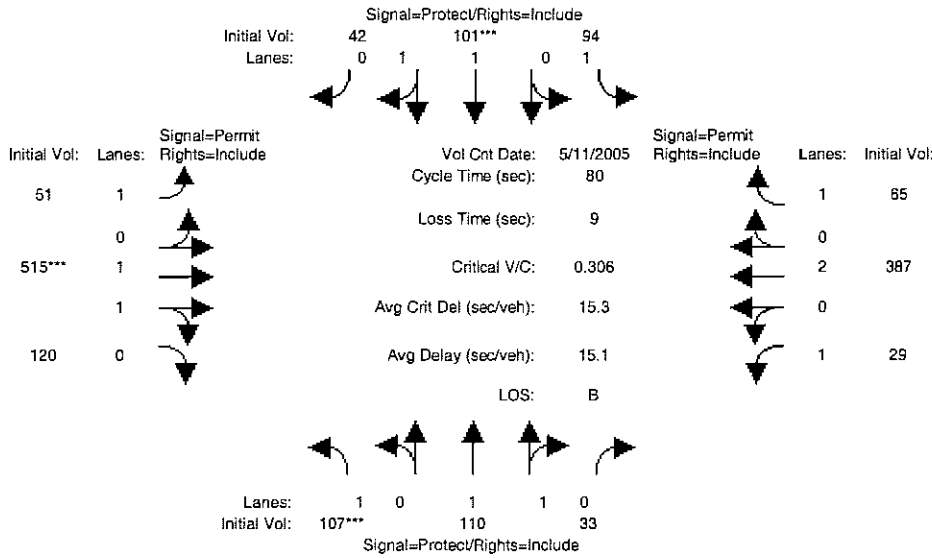
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
ExistAM

Intersection #4: Monterey Street / Tenth Street



Street Name:	Monterey Street						Tenth Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 11 May 2005 << 7:45 AM												
Base Vol:	107	110	33	94	101	42	51	515	120	29	387	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	110	33	94	101	42	51	515	120	29	387	65
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	107	110	33	94	101	42	51	515	120	29	387	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	107	110	33	94	101	42	51	515	120	29	387	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	110	33	94	101	42	51	515	120	29	387	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	107	110	33	94	101	42	51	515	120	29	387	65
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.53	0.47	1.00	1.40	0.60	1.00	1.61	0.39	1.00	2.00	1.00
Final Sat.:	1750	2846	854	1750	2612	1086	1750	3000	699	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.04	0.04	0.05	0.04	0.04	0.03	0.17	0.17	0.02	0.10	0.04
Crit Moves:	****				****			****				
Green Time:	16.0	15.4	15.4	10.7	10.1	10.1	44.9	44.9	44.9	44.9	44.9	44.9
Volume/Cap:	0.31	0.20	0.20	0.40	0.31	0.31	0.05	0.31	0.31	0.03	0.18	0.07
Uniform Del:	27.3	27.2	27.2	31.7	31.8	31.8	7.9	9.3	9.3	7.8	8.6	8.0
IncremntDel:	0.5	0.1	0.1	1.1	0.4	0.4	0.0	0.1	0.1	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	27.8	27.3	27.3	32.8	32.1	32.1	8.0	9.4	9.4	7.8	8.6	8.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.8	27.3	27.3	32.8	32.1	32.1	8.0	9.4	9.4	7.8	8.6	8.0
HCM2k95th:	5	3	3	5	4	4	1	8	8	1	5	2

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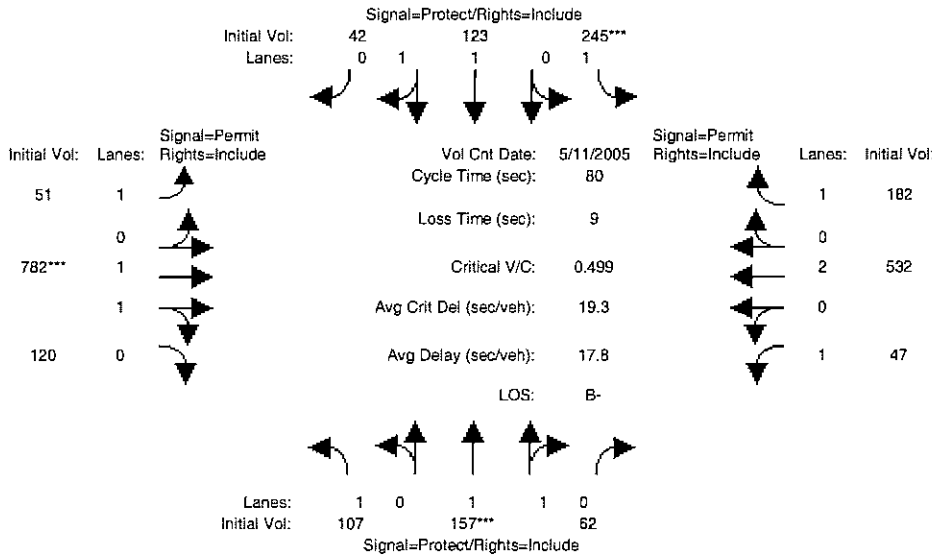
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
BackAM

Intersection #4: Monterey Street / Tenth Street



Street Name:	Monterey Street						Tenth Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 11 May 2005 << 7:45 AM												
Base Vol:	107	110	33	94	101	42	51	515	120	29	387	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	110	33	94	101	42	51	515	120	29	387	65
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
App trips:	0	47	29	151	22	0	0	267	0	18	145	117
Initial Fut:	107	157	62	245	123	42	51	782	120	47	532	182
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	107	157	62	245	123	42	51	782	120	47	532	182
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	157	62	245	123	42	51	782	120	47	532	182
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	107	157	62	245	123	42	51	782	120	47	532	182
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.42	0.58	1.00	1.48	0.52	1.00	1.73	0.27	1.00	2.00	1.00
Final Sat.:	1750	2652	1047	1750	2757	942	1750	3207	492	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.06	0.14	0.04	0.04	0.03	0.24	0.24	0.03	0.14	0.10
Crit Moves:		****		****				****				
Green Time:	13.3	10.0	10.0	22.3	19.0	19.0	38.7	38.7	38.7	38.7	38.7	38.7
Volume/Cap:	0.37	0.47	0.47	0.50	0.19	0.19	0.06	0.50	0.50	0.06	0.29	0.21
Uniform Del:	29.6	32.6	32.6	24.2	24.4	24.4	11.0	14.1	14.1	10.9	12.4	11.9
IncremntDel:	0.8	0.8	0.8	0.8	0.1	0.1	0.0	0.2	0.2	0.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	30.4	33.3	33.3	25.1	24.5	24.5	11.0	14.3	14.3	11.0	12.5	12.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.4	33.3	33.3	25.1	24.5	24.5	11.0	14.3	14.3	11.0	12.5	12.0
HCM2k95th:	5	6	6	11	3	3	1	15	14	1	8	5

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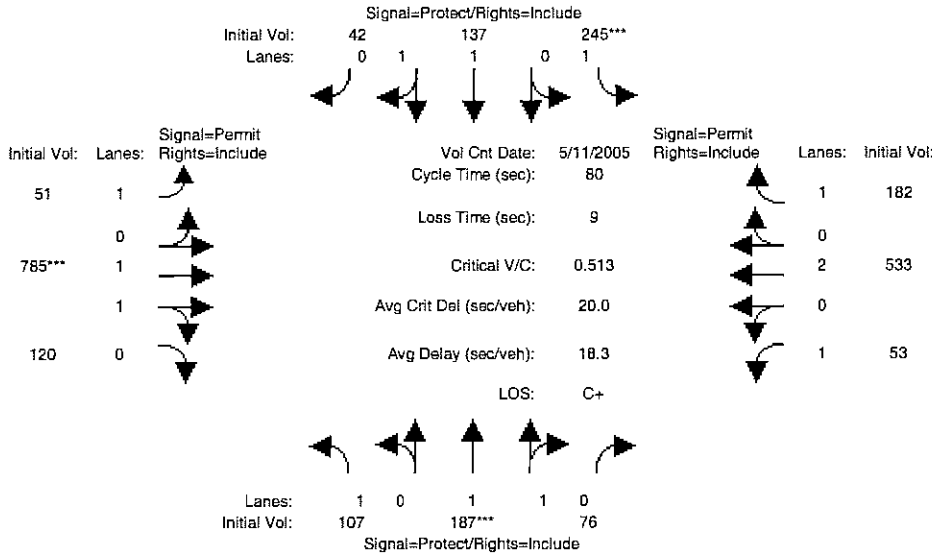
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
ProjAM

Intersection #4: Monterey Street / Tenth Street



Street Name:	Monterey Street						Tenth Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 11 May 2005 << 7:45 AM												
Base Vol:	107	110	33	94	101	42	51	515	120	29	387	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	110	33	94	101	42	51	515	120	29	387	65
Added Vol:	0	30	14	0	14	0	0	3	0	6	1	0
App trips:	0	47	29	151	22	0	0	267	0	18	145	117
Initial Fut:	107	187	76	245	137	42	51	785	120	53	533	182
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	107	187	76	245	137	42	51	785	120	53	533	182
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	187	76	245	137	42	51	785	120	53	533	182
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	107	187	76	245	137	42	51	785	120	53	533	182
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.41	0.59	1.00	1.52	0.48	1.00	1.73	0.27	1.00	2.00	1.00
Final Sat.:	1750	2630	1069	1750	2831	868	1750	3209	491	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.07	0.07	0.14	0.05	0.05	0.03	0.24	0.24	0.03	0.14	0.10
Crit Moves:		****		****				****				
Green Time:	13.5	11.1	11.1	21.8	19.3	19.3	38.1	38.1	38.1	38.1	38.1	38.1
Volume/Cap:	0.36	0.51	0.51	0.51	0.20	0.20	0.06	0.51	0.51	0.06	0.29	0.22
Delay/Veh:	30.2	32.9	32.9	25.6	24.3	24.3	11.3	14.8	14.8	11.3	12.8	12.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.2	32.9	32.9	25.6	24.3	24.3	11.3	14.8	14.8	11.3	12.8	12.4
HCM2k95th:	5	7	7	11	4	4	1	15	15	1	8	5

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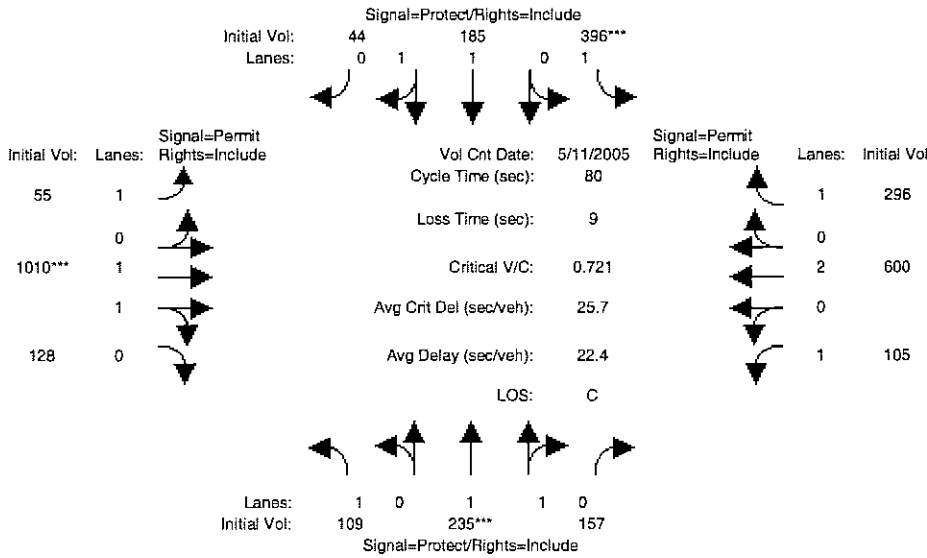
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
CumlAM

Intersection #4: Monterey Street / Tenth Street



Street Name:	Monterey Street						Tenth Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 11 May 2005 << 7:45 AM												
Base Vol:	107	110	33	94	101	42	51	515	120	29	387	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	110	33	94	101	42	51	515	120	29	387	65
Added Vol:	0	30	14	0	14	0	0	3	0	6	1	0
App trips+P:	2	95	110	302	70	2	4	492	8	70	212	231
Initial Fut:	109	235	157	396	185	44	55	1010	128	105	600	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	109	235	157	396	185	44	55	1010	128	105	600	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	109	235	157	396	185	44	55	1010	128	105	600	296
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	109	235	157	396	185	44	55	1010	128	105	600	296
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.18	0.82	1.00	1.61	0.39	1.00	1.77	0.23	1.00	2.00	1.00
Final Sat.:	1750	2217	1481	1750	2989	711	1750	3284	416	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.06	0.11	0.11	0.23	0.06	0.06	0.03	0.31	0.31	0.06	0.16	0.17
Crit Moves:		****		****				****				
Green Time:	15.2	11.8	11.8	25.1	21.7	21.7	34.1	34.1	34.1	34.1	34.1	34.1
Volume/Cap:	0.33	0.72	0.72	0.72	0.23	0.23	0.07	0.72	0.72	0.14	0.37	0.40
Uniform Del:	28.0	32.6	32.6	24.3	22.7	22.7	13.6	19.0	19.0	14.0	15.6	15.8
IncremntDel:	0.6	4.7	4.7	4.6	0.1	0.1	0.0	1.7	1.7	0.1	0.1	0.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	28.6	37.2	37.2	29.0	22.8	22.8	13.6	20.6	20.6	14.1	15.8	16.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.6	37.2	37.2	29.0	22.8	22.8	13.6	20.6	20.6	14.1	15.8	16.2
HCM2k95th:	5	12	12	19	5	5	2	23	23	3	10	10

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Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

Intersection		ExistPM				BackPM				ProjPM						CumlPM			
		LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Crit V/C Change	Avg Crit Del (sec)	Avg Crit Del Change	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)
#1	Luchessa Avenue / Thomas Road	A	9.8	0.413	9.8	B	11.9	0.560	11.9	B	13.3	0.627	+ 0.067	13.3	+ 1.4	F	297.5	2.105	297.5
#2	Luchessa Avenue / Princevalle Street	B	3.0	0.000	3.0	C	3.3	0.000	3.3	C	3.5	0.000	+ 0.000	3.5	+ 0.2	F	20.8	0.000	20.8
#3	Monterey Street / Luchessa Avenue	C-	31.5	0.539	34.0	D+	33.4	0.636	36.5	D	37.8	0.749	+ 0.112	41.1	+ 4.5	F	67.0	1.048	90.6
#4	Monterey Street / Tenth Street	C+	19.7	0.376	20.8	C	28.5	0.778	31.1	C-	29.2	0.793	+ 0.015	32.2	+ 1.1	E-	47.1	1.040	77.9

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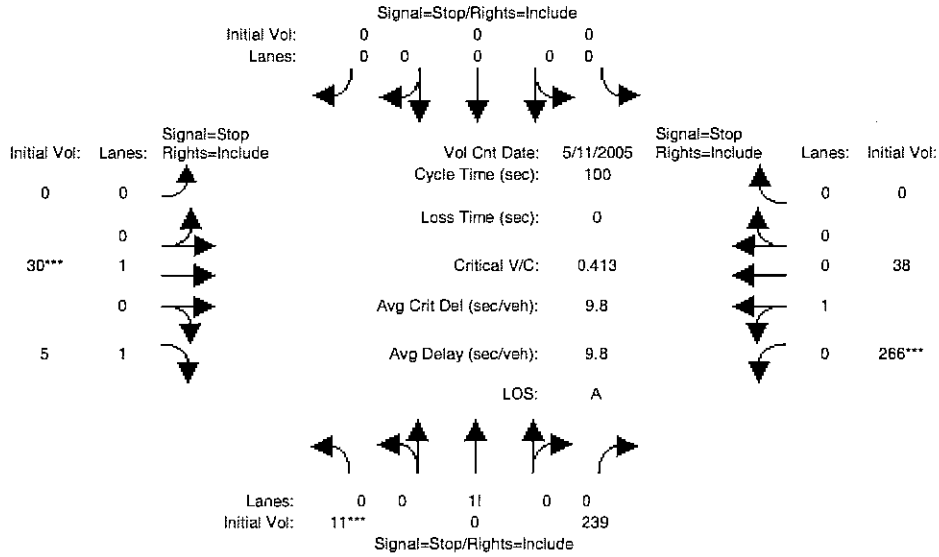
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
ExistPM

Intersection #1: Luchessa Avenue / Thomas Road



Street Name:	Thomas Road						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 11 May 2005 << 4:30PM												
Base Vol:	11	0	239	0	0	0	0	30	5	266	38	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	239	0	0	0	0	30	5	266	38	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	11	0	239	0	0	0	0	30	5	266	38	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	0	239	0	0	0	0	30	5	266	38	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	0	239	0	0	0	0	30	5	266	38	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	11	0	239	0	0	0	0	30	5	266	38	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04	0.00	0.96	0.00	0.00	0.00	0.00	1.00	1.00	0.87	0.13	0.00
Final Sat.:	36	0	789	0	0	0	0	644	737	644	92	0
Capacity Analysis Module:												
Vol/Sat:	0.30	xxxx	0.30	xxxx	xxxx	xxxx	xxxx	0.05	0.01	0.41	0.41	xxxx
Crit Moves:	****							****		****		
Delay/Veh:	8.8	0.0	8.8	0.0	0.0	0.0	0.0	8.2	7.3	10.9	10.9	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	8.8	0.0	8.8	0.0	0.0	0.0	0.0	8.2	7.3	10.9	10.9	0.0
LOS by Move:	A	*	A	*	*	*	*	A	A	B	B	*
ApproachDel:		8.8			xxxxxx			8.1			10.9	
Delay Adj:		1.00			xxxxx			1.00			1.00	
ApprAdjDel:		8.8			xxxxxx			8.1			10.9	
LOS by Appr:		A			*			A			B	

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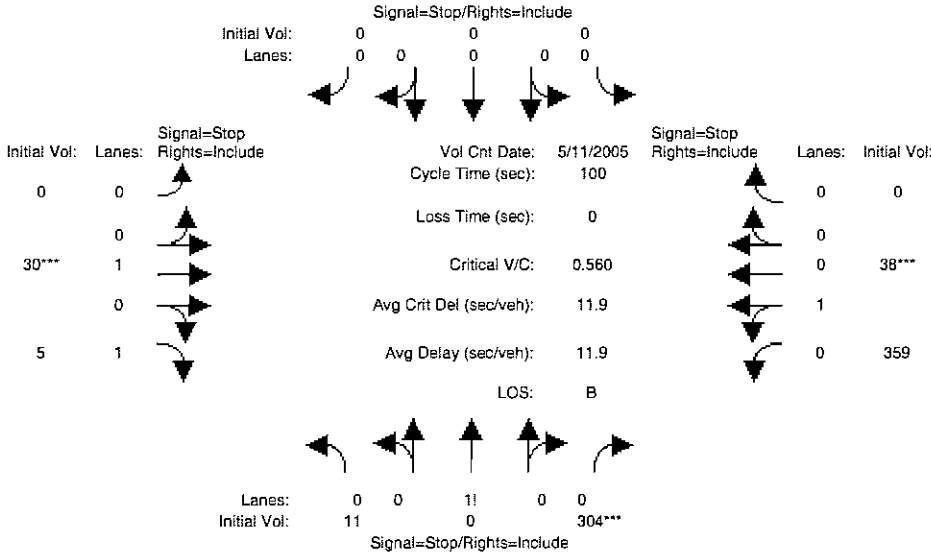
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
BackPM

Intersection #1: Luchessa Avenue / Thomas Road



Street Name:	Thomas Road						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 11 May 2005 << 4:30PM												
Base Vol:	11	0	239	0	0	0	0	30	5	266	38	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	239	0	0	0	0	30	5	266	38	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
App trips:	0	0	65	0	0	0	0	0	0	93	0	0
Initial Fut:	11	0	304	0	0	0	0	30	5	359	38	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	0	304	0	0	0	0	30	5	359	38	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	0	304	0	0	0	0	30	5	359	38	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	11	0	304	0	0	0	0	30	5	359	38	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.00	0.97	0.00	0.00	0.00	0.00	1.00	1.00	0.90	0.10	0.00
Final Sat.:	27	0	750	0	0	0	0	602	681	641	68	0
Capacity Analysis Module:												
Vol/Sat:	0.41	xxxx	0.41	xxxx	xxxx	xxxx	xxxx	0.05	0.01	0.56	0.56	xxxx
Crit Moves:			****					****			****	
Delay/Veh:	10.1	0.0	10.1	0.0	0.0	0.0	0.0	8.6	7.6	13.7	13.7	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	10.1	0.0	10.1	0.0	0.0	0.0	0.0	8.6	7.6	13.7	13.7	0.0
LOS by Move:	B	*	B	*	*	*	*	A	A	B	B	*
ApproachDel:	10.1			xxxxxx			8.4			13.7		
Delay Adj:	1.00			xxxxx			1.00			1.00		
ApprAdjDel:	10.1			xxxxxx			8.4			13.7		
LOS by Appr:	B			*			A			B		

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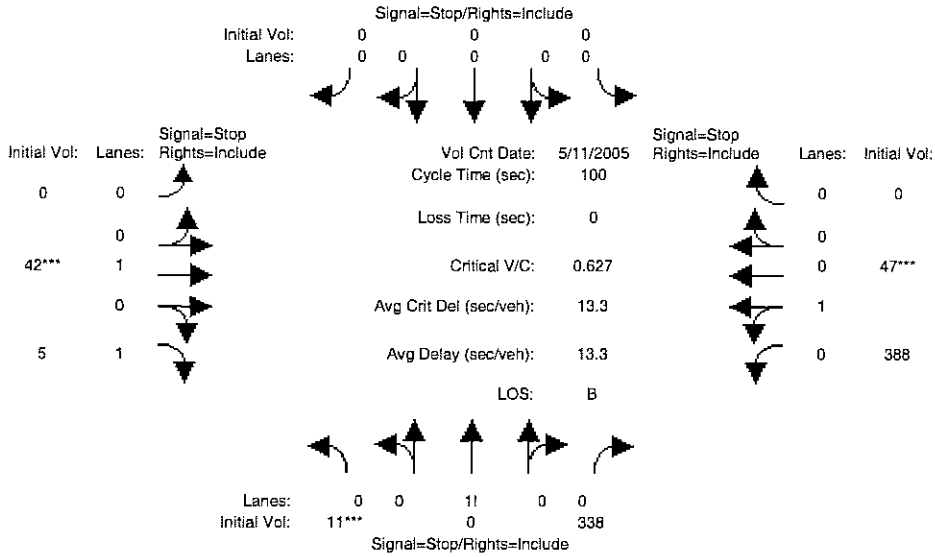
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
ProjPM

Intersection #1: Luchessa Avenue / Thomas Road



Street Name:	Thomas Road						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 11 May 2005 << 4:30PM												
Base Vol:	11	0	239	0	0	0	0	30	5	266	38	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	239	0	0	0	0	30	5	266	38	0
Added Vol:	0	0	34	0	0	0	0	12	0	29	9	0
App trips:	0	0	65	0	0	0	0	0	0	93	0	0
Initial Fut:	11	0	338	0	0	0	0	42	5	388	47	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	11	0	338	0	0	0	0	42	5	388	47	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	11	0	338	0	0	0	0	42	5	388	47	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	11	0	338	0	0	0	0	42	5	388	47	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.03	0.00	0.97	0.00	0.00	0.00	0.00	1.00	1.00	0.89	0.11	0.00
Final Sat.:	24	0	729	0	0	0	0	581	656	619	75	0
Capacity Analysis Module:												
Vol/Sat:	0.46	xxxx	0.46	xxxx	xxxx	xxxx	xxxx	0.07	0.01	0.63	0.63	xxxx
Crit Moves:	****							****			****	
Delay/Veh:	11.0	0.0	11.0	0.0	0.0	0.0	0.0	8.9	7.8	15.7	15.7	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.0	0.0	11.0	0.0	0.0	0.0	0.0	8.9	7.8	15.7	15.7	0.0
LOS by Move:	B	*	B	*	*	*	*	A	A	C	C	*
ApproachDel:	11.0			xxxxxx			8.8			15.7		
Delay Adj:	1.00			xxxxx			1.00			1.00		
ApprAdjDel:	11.0			xxxxxx			8.8			15.7		
LOS by Appr:	B			*			A			C		

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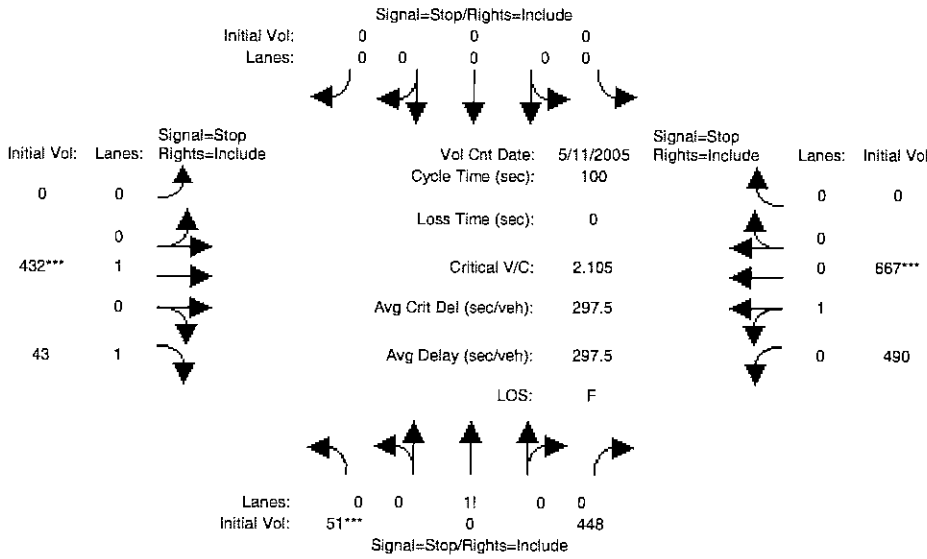
Level Of Service Computation Report
2000 HCM 4-Way Stop (Future Volume Alternative)
CumPM

Intersection #1: Luchessa Avenue / Thomas Road



Street Name:	Thomas Road						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module: >> Count Date: 11 May 2005 << 4:30PM												
Base Vol:	11	0	239	0	0	0	0	30	5	266	38	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	239	0	0	0	0	30	5	266	38	0
Added Vol:	0	0	34	0	0	0	0	12	0	29	9	0
App trips+P:	40	0	175	0	0	0	0	390	38	195	620	0
Initial Fut:	51	0	448	0	0	0	0	432	43	490	667	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	0	448	0	0	0	0	432	43	490	667	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	0	448	0	0	0	0	432	43	490	667	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	51	0	448	0	0	0	0	432	43	490	667	0
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.10	0.00	0.90	0.00	0.00	0.00	0.00	1.00	1.00	0.42	0.58	0.00
Final Sat.:	60	0	526	0	0	0	0	506	562	233	317	0
Capacity Analysis Module:												
Vol/Sat:	0.85	xxxx	0.85	xxxx	xxxx	xxxx	xxxx	0.85	0.08	2.11	2.11	xxxx
Crit Moves:	****							****			****	
Delay/Veh:	33.7	0.0	33.7	0.0	0.0	0.0	0.0	37.7	9.6	519.0	519	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.7	0.0	33.7	0.0	0.0	0.0	0.0	37.7	9.6	519.0	519	0.0
LOS by Move:	D	*	D	*	*	*	*	E	A	F	F	*
ApproachDel:		33.7			xxxxxx			35.1			519.0	
Delay Adj:		1.00			xxxxx			1.00			1.00	
ApprAdjDel:		33.7			xxxxxx			35.1			519.0	
LOS by Appr:		D			*			E			F	

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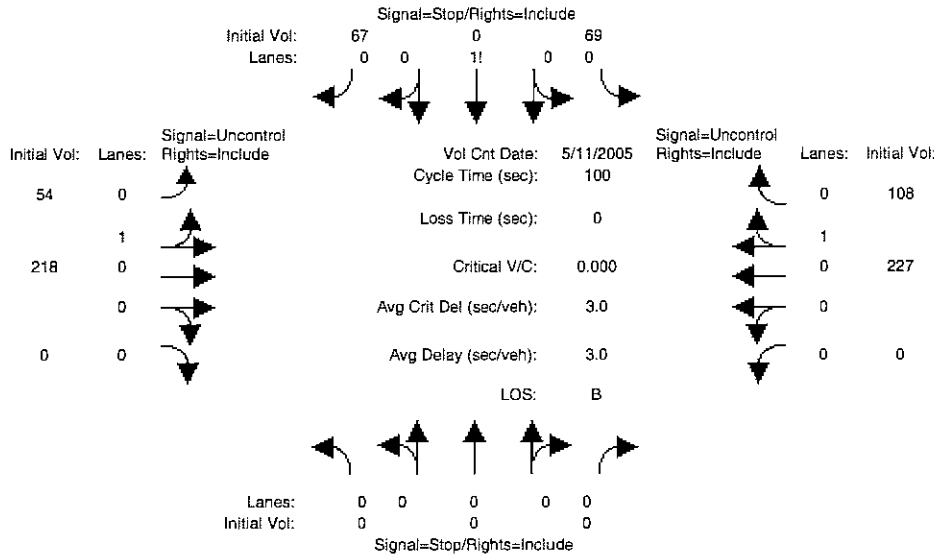
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
ExistPM

Intersection #2: Luchessa Avenue / Princevalle Street



Street Name:	Princevalle Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 11 May 2005 << 4:30 PM												
Base Vol:	0	0	0	69	0	67	54	218	0	0	227	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	69	0	67	54	218	0	0	227	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	69	0	67	54	218	0	0	227	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	69	0	67	54	218	0	0	227	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	69	0	67	54	218	0	0	227	108
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	607	xxxx	281	335	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	463	xxxx	763	1236	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	447	xxxx	763	1236	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.15	xxxx	0.09	0.04	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	561	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.9	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	13.4	xxxxx	8.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			13.4			xxxxxx			xxxxxx		
ApproachLOS:	*			B			*			*		

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	69	0	67	54	218	0	0	227	108
ApproachDel:	xxxxxx			13.4			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.5]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=136]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=743]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	69	0	67	54	218	0	0	227	108

Major Street Volume: 607
Minor Approach Volume: 136
Minor Approach Volume Threshold: 353

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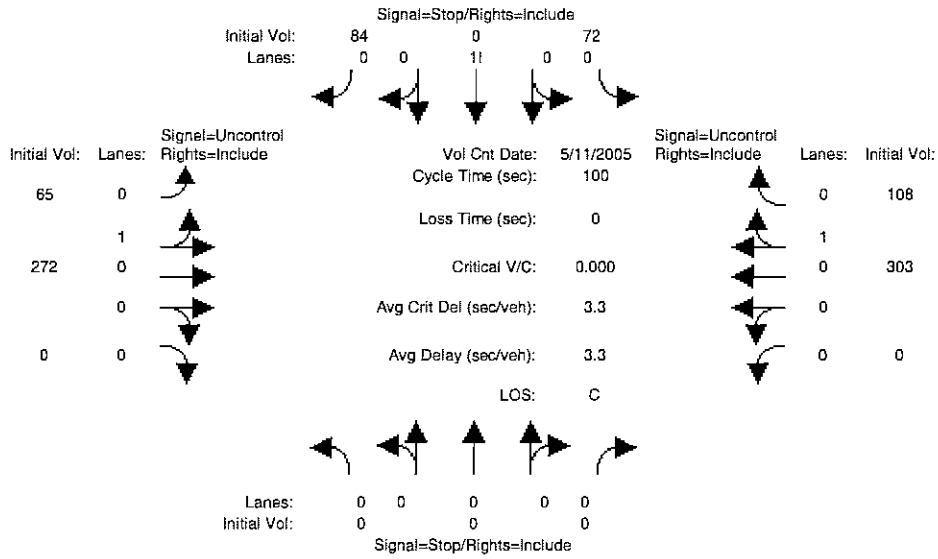
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
BackPM

Intersection #2: Luchessa Avenue / Princevalle Street



Street Name:	Princevalle Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 11 May 2005 << 4:30 PM												
Base Vol:	0	0	0	69	0	67	54	218	0	0	227	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	69	0	67	54	218	0	0	227	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
App trips:	0	0	0	3	0	17	11	54	0	0	76	0
Initial Fut:	0	0	0	72	0	84	65	272	0	0	303	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	72	0	84	65	272	0	0	303	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	72	0	84	65	272	0	0	303	108
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	759	xxxx	357	411	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	377	xxxx	692	1159	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	360	xxxx	692	1159	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.20	xxxx	0.12	0.06	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	486	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.4	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	15.9	xxxxx	8.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			15.9			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	72	0	84	65	272	0	0	303	108
ApproachDel:	xxxxxx			15.9			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.7]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=156]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=904]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	72	0	84	65	272	0	0	303	108

Major Street Volume: 748
Minor Approach Volume: 156
Minor Approach Volume Threshold: 297

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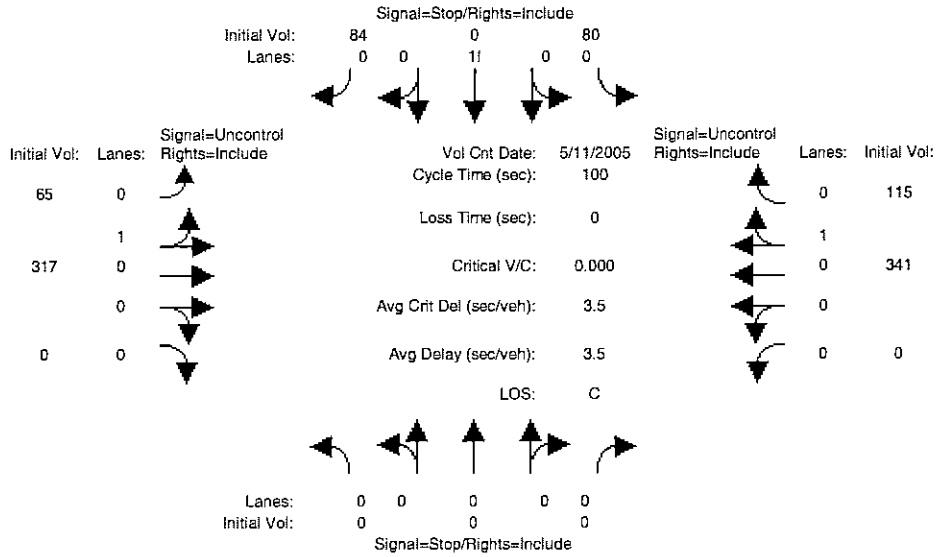
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
ProjPM

Intersection #2: Luchessa Avenue / Princevalle Street



Street Name:	Princevalle Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 11 May 2005 << 4:30 PM												
Base Vol:	0	0	0	69	0	67	54	218	0	0	227	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	69	0	67	54	218	0	0	227	108
Added Vol:	0	0	0	8	0	0	0	45	0	0	38	7
App trips:	0	0	0	3	0	17	11	54	0	0	76	0
Initial Fut:	0	0	0	80	0	84	65	317	0	0	341	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	80	0	84	65	317	0	0	341	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	80	0	84	65	317	0	0	341	115
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	846	xxxx	399	456	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	336	xxxx	656	1115	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	320	xxxx	656	1115	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.25	xxxx	0.13	0.06	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	434	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	1.7	xxxxx	0.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	18.3	xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	C	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			18.3			xxxxxx			xxxxxx		
ApproachLOS:	*			C			*			*		

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	80	0	84	65	317	0	0	341	115
ApproachDel:	xxxxxx			18.3			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.8]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=164]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1002]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	80	0	84	65	317	0	0	341	115

Major Street Volume: 838
Minor Approach Volume: 164
Minor Approach Volume Threshold: 267

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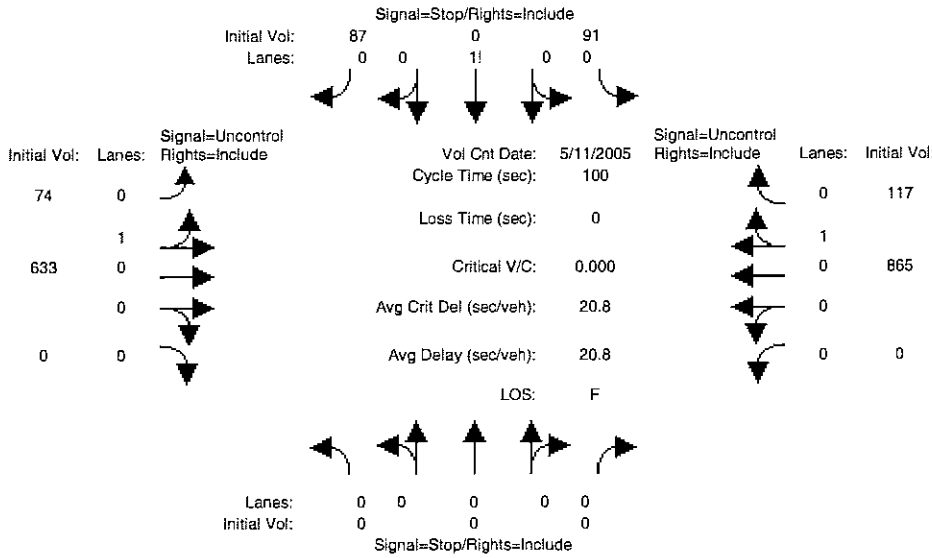
Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
CumPM

Intersection #2: Luchessa Avenue / Princevalle Street



Street Name:	Princevalle Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 11 May 2005 << 4:30 PM												
Base Vol:	0	0	0	69	0	67	54	218	0	0	227	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	69	0	67	54	218	0	0	227	108
Added Vol:	0	0	0	8	0	0	0	45	0	0	38	7
App trips+P:	0	0	0	14	0	20	20	370	0	0	600	2
Initial Fut:	0	0	0	91	0	87	74	633	0	0	865	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	91	0	87	74	633	0	0	865	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	91	0	87	74	633	0	0	865	117
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1705	xxxx	924	982	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	102	xxxx	330	711	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	93	xxxx	330	711	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.98	xxxx	0.26	0.10	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	144	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	10.6	xxxxx	0.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	214	xxxxx	10.6	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	B	*	*	*	*	*
ApproachDel:	xxxxxx			213.9			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

Peak Hour Delay Signal Warrant Report

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant Met

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	91	0	87	74	633	0	0	865	117
ApproachDel:	xxxxxx			213.9			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=10.6]
SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=178]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1867]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #2 Luchessa Avenue / Princevalle Street

****

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0 0	0 0	0	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0
Final Vol.:	0	0	0	91	0	87	74	633	0	0	865	117

Major Street Volume: 1689
Minor Approach Volume: 178
Minor Approach Volume Threshold: 80 [less than minimum of 100]

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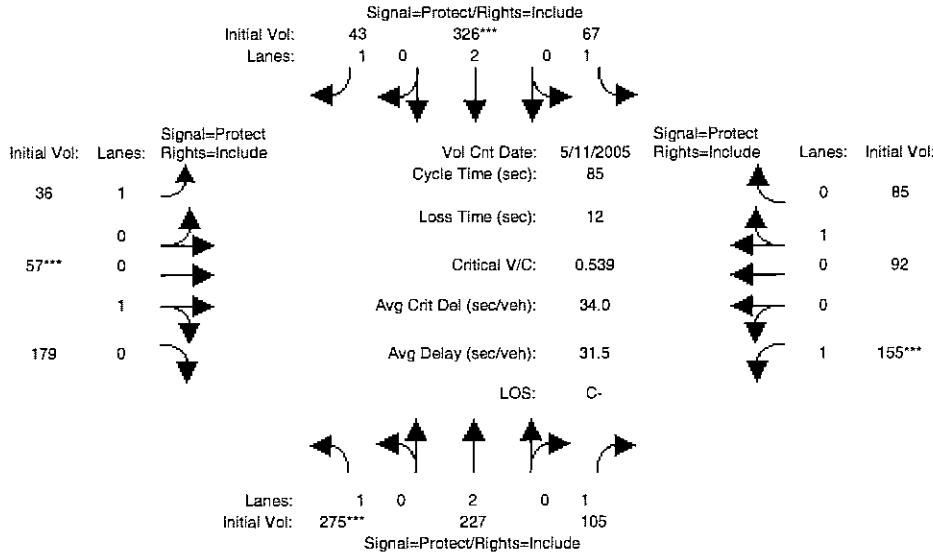
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
ExistPM

Intersection #3: Monterey Street / Luchessa Avenue



Street Name:	Monterey Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 11 May 2005 << 5:00 PM												
Base Vol:	275	227	105	67	326	43	36	57	179	155	92	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	275	227	105	67	326	43	36	57	179	155	92	85
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	275	227	105	67	326	43	36	57	179	155	92	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	275	227	105	67	326	43	36	57	179	155	92	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	275	227	105	67	326	43	36	57	179	155	92	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	275	227	105	67	326	43	36	57	179	155	92	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.24	0.76	1.00	0.52	0.48
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	435	1365	1750	936	864
Capacity Analysis Module:												
Vol/Sat:	0.16	0.06	0.06	0.04	0.09	0.02	0.02	0.13	0.13	0.09	0.10	0.10
Crit Moves:	****				****			****		****		
Green Time:	24.8	22.5	22.5	15.8	13.5	13.5	14.3	20.7	20.7	14.0	20.4	20.4
Volume/Cap:	0.54	0.23	0.23	0.21	0.54	0.15	0.12	0.54	0.54	0.54	0.41	0.41
Uniform Del:	25.3	24.4	24.4	29.3	32.9	30.8	30.0	28.0	28.0	32.6	27.2	27.2
IncremntDel:	4.0	0.5	1.1	1.4	3.4	1.2	0.9	4.7	4.7	7.1	2.9	2.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	29.3	24.9	25.5	30.7	36.3	32.0	30.9	32.7	32.7	39.6	30.1	30.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.3	24.9	25.5	30.7	36.3	32.0	30.9	32.7	32.7	39.6	30.1	30.1
HCM2k95th:	12	5	5	4	9	3	2	11	11	9	9	9

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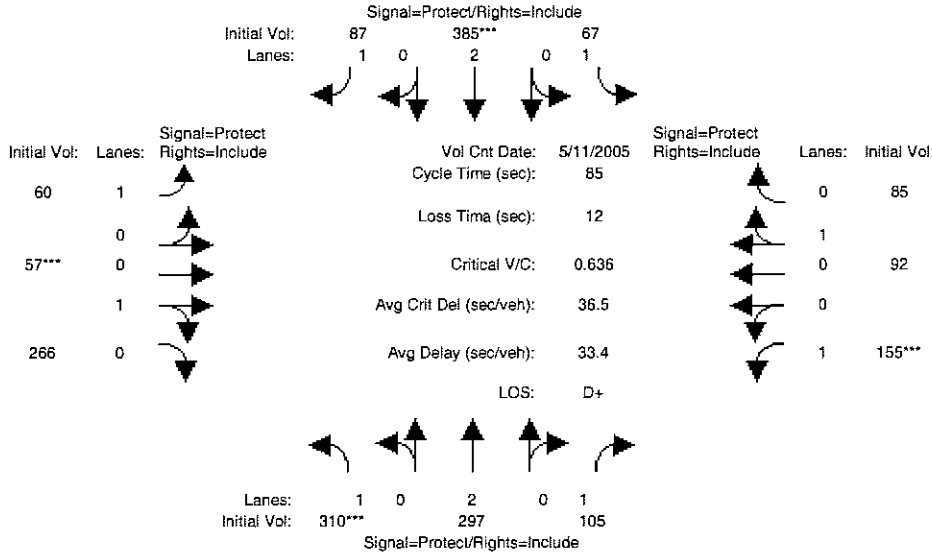
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
BackPM

Intersection #3: Monterey Street / Luchessa Avenue



Street Name:	Monterey Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 11 May 2005 << 5:00 PM												
Base Vol:	275	227	105	67	326	43	36	57	179	155	92	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	275	227	105	67	326	43	36	57	179	155	92	85
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
App trips:	35	70	0	0	59	44	24	0	87	0	0	0
Initial Fut:	310	297	105	67	385	87	60	57	266	155	92	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	310	297	105	67	385	87	60	57	266	155	92	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	310	297	105	67	385	87	60	57	266	155	92	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	310	297	105	67	385	87	60	57	266	155	92	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.18	0.82	1.00	0.52	0.48
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	318	1482	1750	936	864
Capacity Analysis Module:												
Vol/Sat:	0.18	0.08	0.06	0.04	0.10	0.05	0.03	0.18	0.18	0.09	0.10	0.10
Crit Moves:	****				****			****		****		
Green Time:	23.7	21.9	21.9	15.3	13.5	13.5	14.7	24.0	24.0	11.8	21.1	21.1
Volume/Cap:	0.64	0.30	0.23	0.21	0.64	0.31	0.20	0.64	0.64	0.64	0.40	0.40
Uniform Del:	26.9	25.4	24.9	29.7	33.4	31.6	30.1	26.7	26.7	34.6	26.7	26.7
IncremntDel:	6.2	0.8	1.2	1.5	5.0	2.9	1.5	6.0	6.0	12.0	2.6	2.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	33.1	26.2	26.1	31.2	38.5	34.5	31.5	32.7	32.7	46.6	29.3	29.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	33.1	26.2	26.1	31.2	38.5	34.5	31.5	32.7	32.7	46.6	29.3	29.3
HCM2k95th:	14	7	5	4	11	5	3	15	15	10	8	8

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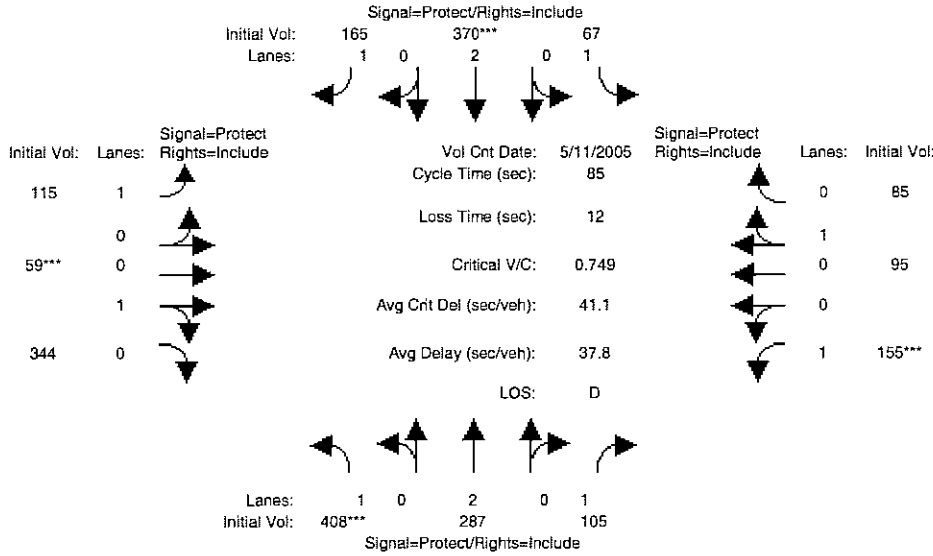
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
ProjPM

Intersection #3: Monterey Street / Luchessa Avenue



Street Name:	Monterey Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 11 May 2005 << 5:00 PM												
Base Vol:	275	227	105	67	326	43	36	57	179	155	92	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	275	227	105	67	326	43	36	57	179	155	92	85
Added Vol:	88	0	0	0	0	63	45	2	63	0	3	0
App trips+P:	45	60	0	0	44	59	34	0	102	0	0	0
Initial Fut:	408	287	105	67	370	165	115	59	344	155	95	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	408	287	105	67	370	165	115	59	344	155	95	85
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	408	287	105	67	370	165	115	59	344	155	95	85
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	408	287	105	67	370	165	115	59	344	155	95	85
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.15	0.85	1.00	0.53	0.47
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	264	1536	1750	950	850
Capacity Analysis Module:												
Vol/Sat:	0.23	0.08	0.06	0.04	0.10	0.09	0.07	0.22	0.22	0.09	0.10	0.10
Crit Moves:	****				****			****		****		
Green Time:	26.5	22.1	22.1	15.5	11.1	11.1	14.6	25.4	25.4	10.1	20.9	20.9
Volume/Cap:	0.75	0.29	0.23	0.21	0.75	0.72	0.38	0.75	0.75	0.75	0.41	0.41
Delay/Veh:	35.4	25.9	26.0	31.1	45.6	53.7	34.9	36.1	36.1	58.0	29.7	29.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	35.4	25.9	26.0	31.1	45.6	53.7	34.9	36.1	36.1	58.0	29.7	29.7
HCM2k95th:	19	7	5	4	12	11	6	19	19	11	9	9

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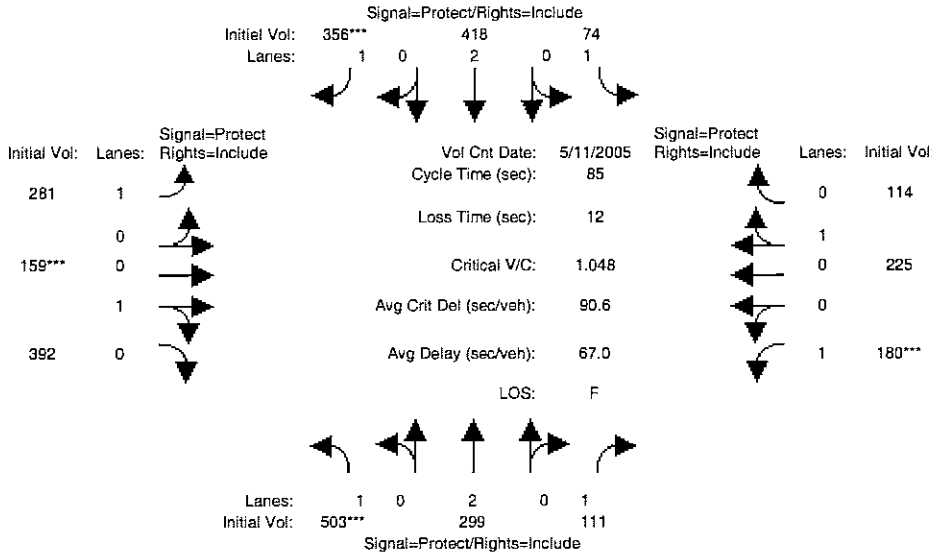
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
CumPM

Intersection #3: Monterey Street / Luchessa Avenue



Street Name:	Monterey Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 11 May 2005 << 5:00 PM												
Base Vol:	275	227	105	67	326	43	36	57	179	155	92	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	275	227	105	67	326	43	36	57	179	155	92	85
Added Vol:	88	0	0	0	0	63	45	2	63	0	3	0
App trips+P:	140	72	6	7	92	250	200	100	150	25	130	29
Initial Fut:	503	299	111	74	418	356	281	159	392	180	225	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	503	299	111	74	418	356	281	159	392	180	225	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	503	299	111	74	418	356	281	159	392	180	225	114
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	503	299	111	74	418	356	281	159	392	180	225	114
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.92	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.29	0.71	1.00	0.66	0.34
Final Sat.:	1750	3800	1750	1750	3800	1750	1750	519	1281	1750	1195	605
Capacity Analysis Module:												
Vol/Sat:	0.29	0.08	0.06	0.04	0.11	0.20	0.16	0.31	0.31	0.10	0.19	0.19
Crit Moves:	****					****		****		****		
Green Time:	23.3	23.4	23.4	16.4	16.5	16.5	15.3	24.8	24.8	8.3	17.9	17.9
Volume/Cap:	1.05	0.29	0.23	0.22	0.57	1.05	0.89	1.05	1.05	1.05	0.89	0.89
Uniform Del:	30.8	24.2	23.8	28.9	31.0	34.2	34.1	30.1	30.1	38.3	32.6	32.6
IncremntDel:	54.1	0.7	1.1	1.5	3.1	61.9	29.7	52.3	52.3	81.8	25.9	25.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	85.0	24.9	24.9	30.4	34.1	96.1	63.8	82.4	82.4	120.2	58.5	58.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	85.0	24.9	24.9	30.4	34.1	96.1	63.8	82.4	82.4	120.2	58.5	58.5
HCM2k95th:	34	7	5	4	11	27	18	37	37	17	21	21

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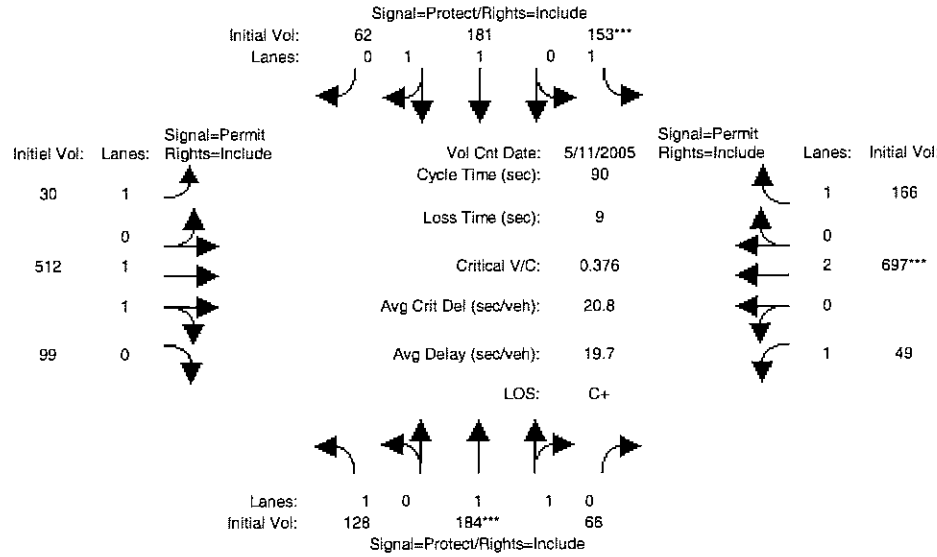
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
ExistPM

Intersection #4: Monterey Street / Tenth Street



Street Name:	Monterey Street						Tenth Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 11 May 2005 << 4:30 PM												
Base Vol:	128	184	66	153	181	62	30	512	99	49	697	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	184	66	153	181	62	30	512	99	49	697	166
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Approved:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	128	184	66	153	181	62	30	512	99	49	697	166
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	184	66	153	181	62	30	512	99	49	697	166
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	184	66	153	181	62	30	512	99	49	697	166
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	128	184	66	153	181	62	30	512	99	49	697	166
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.46	0.54	1.00	1.48	0.52	1.00	1.67	0.33	1.00	2.00	1.00
Final Sat.:	1750	2722	977	1750	2755	944	1750	3100	599	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.07	0.09	0.07	0.07	0.02	0.17	0.17	0.03	0.18	0.09
Crit Moves:		****		****							****	
Green Time:	15.3	16.2	16.2	20.9	21.8	21.8	43.9	43.9	43.9	43.9	43.9	43.9
Volume/Cap:	0.43	0.38	0.38	0.38	0.27	0.27	0.04	0.34	0.34	0.06	0.38	0.19
Uniform Del:	33.5	32.5	32.5	29.0	27.6	27.6	12.0	14.1	14.1	12.1	14.5	13.0
IncremntDel:	1.0	0.4	0.4	0.6	0.2	0.2	0.0	0.1	0.1	0.0	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	34.5	32.8	32.8	29.6	27.8	27.8	12.0	14.3	14.3	12.2	14.6	13.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.5	32.8	32.8	29.6	27.8	27.8	12.0	14.3	14.3	12.2	14.6	13.2
HCM2k95th:	7	7	7	8	6	6	1	10	10	1	12	5

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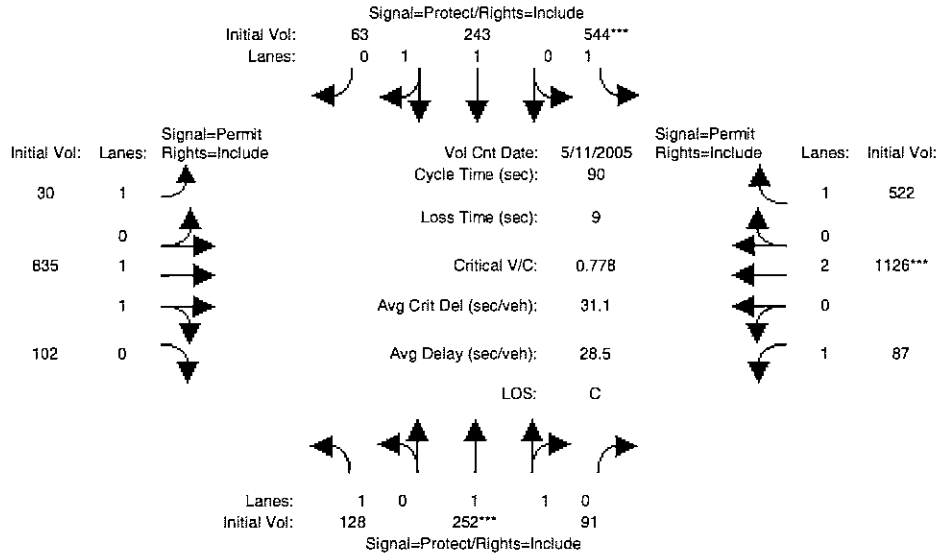
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
BackPM

Intersection #4: Monterey Street / Tenth Street



Street Name:	Monterey Street						Tenth Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 11 May 2005 << 4:30 PM												
Base Vol:	128	184	66	153	181	62	30	512	99	49	697	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	184	66	153	181	62	30	512	99	49	697	166
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
App trips:	0	68	25	391	62	1	0	323	3	38	429	356
Initial Fut:	128	252	91	544	243	63	30	835	102	87	1126	522
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	252	91	544	243	63	30	835	102	87	1126	522
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	252	91	544	243	63	30	835	102	87	1126	522
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	128	252	91	544	243	63	30	835	102	87	1126	522
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.45	0.55	1.00	1.58	0.42	1.00	1.78	0.22	1.00	2.00	1.00
Final Sat.:	1750	2718	981	1750	2938	762	1750	3297	403	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.09	0.09	0.31	0.08	0.08	0.02	0.25	0.25	0.05	0.30	0.30
Crit Moves:		****		****							****	
Green Time:	19.2	10.7	10.7	36.0	27.5	27.5	34.3	34.3	34.3	34.3	34.3	34.3
Volume/Cap:	0.34	0.78	0.78	0.78	0.27	0.27	0.04	0.66	0.66	0.13	0.78	0.78
Uniform Del:	30.0	38.5	38.5	23.5	23.7	23.7	17.5	23.1	23.1	18.1	24.5	24.6
IncremntDel:	0.6	8.5	8.5	5.5	0.1	0.1	0.0	1.2	1.2	0.1	2.7	6.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	30.6	47.0	47.0	29.1	23.8	23.8	17.6	24.3	24.3	18.2	27.2	30.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.6	47.0	47.0	29.1	23.8	23.8	17.6	24.3	24.3	18.2	27.2	30.6
HCM2k95th:	6	13	13	26	7	6	1	21	21	3	27	26

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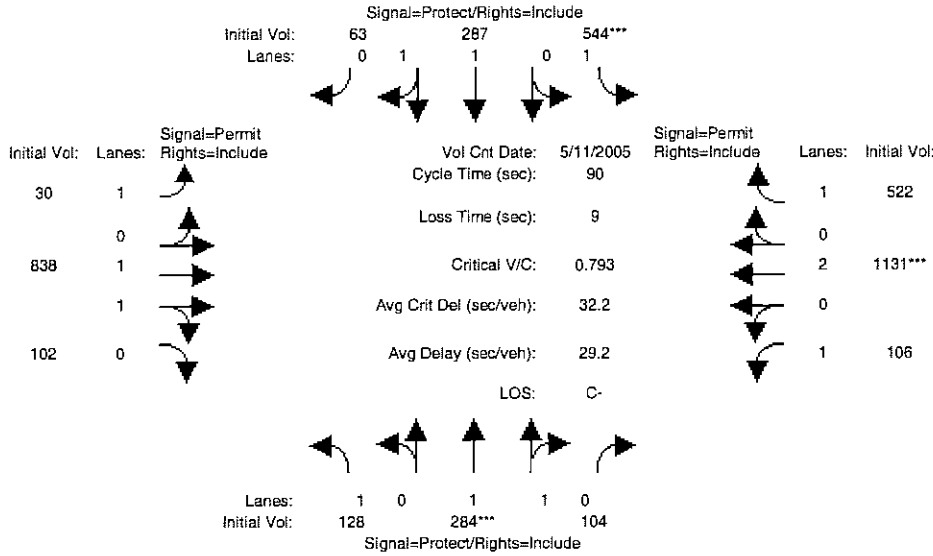
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
ProjPM

Intersection #4: Monterey Street / Tenth Street



Street Name:	Monterey Street						Tenth Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 11 May 2005 << 4:30 PM												
Base Vol:	128	184	66	153	181	62	30	512	99	49	697	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	184	66	153	181	62	30	512	99	49	697	166
Added Vol:	0	32	13	0	44	0	0	3	0	19	5	0
App trips:	0	68	25	391	62	1	0	323	3	38	429	356
Initial Fut:	128	284	104	544	287	63	30	838	102	106	1131	522
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	128	284	104	544	287	63	30	838	102	106	1131	522
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	128	284	104	544	287	63	30	838	102	106	1131	522
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	128	284	104	544	287	63	30	838	102	106	1131	522
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.45	0.55	1.00	1.63	0.37	1.00	1.78	0.22	1.00	2.00	1.00
Final Sat.:	1750	2708	991	1750	3034	666	1750	3298	401	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.07	0.10	0.10	0.31	0.09	0.09	0.02	0.25	0.25	0.06	0.30	0.30
Crit Moves:		****		****							****	
Green Time:	19.4	11.9	11.9	35.3	27.8	27.8	33.8	33.8	33.8	33.8	33.8	33.8
Volume/Cap:	0.34	0.79	0.79	0.79	0.31	0.31	0.05	0.68	0.68	0.16	0.79	0.79
Delay/Veh:	30.4	46.5	46.5	30.4	23.9	23.9	17.9	24.9	24.9	18.8	28.1	31.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.4	46.5	46.5	30.4	23.9	23.9	17.9	24.9	24.9	18.8	28.1	31.6
HCM2k95th:	6	14	14	27	8	7	1	21	21	4	28	26

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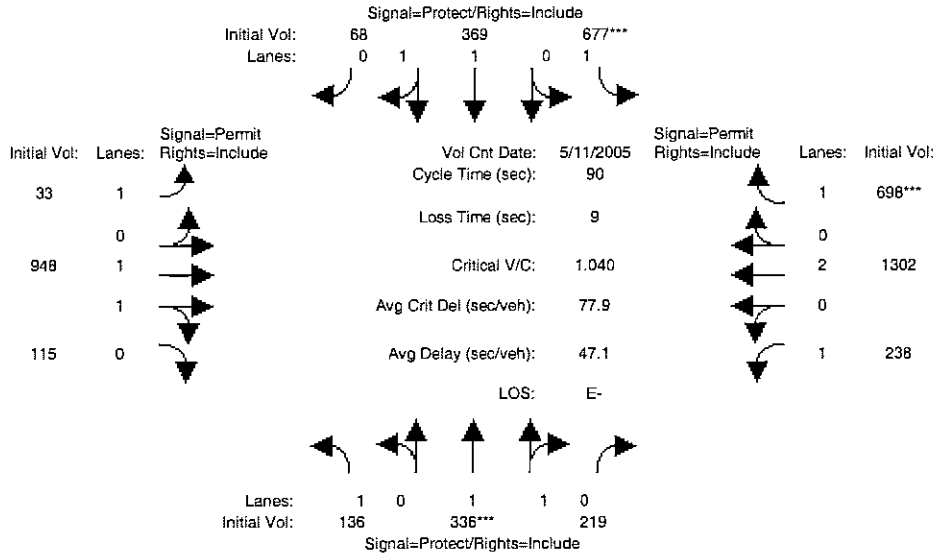
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
CumPM

Intersection #4: Monterey Street / Tenth Street



Street Name:	Monterey Street						Tenth Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Volume Module: >> Count Date: 11 May 2005 << 4:30 PM												
Base Vol:	128	184	66	153	181	62	30	512	99	49	697	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	184	66	153	181	62	30	512	99	49	697	166
Added Vol:	0	32	13	0	44	0	0	3	0	19	5	0
App trips+P:	8	120	140	524	144	6	3	433	16	170	600	532
Initial Fut:	136	336	219	677	369	68	33	948	115	238	1302	698
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	336	219	677	369	68	33	948	115	238	1302	698
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	336	219	677	369	68	33	948	115	238	1302	698
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	136	336	219	677	369	68	33	948	115	238	1302	698
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	1.19	0.81	1.00	1.68	0.32	1.00	1.78	0.22	1.00	2.00	1.00
Final Sat.:	1750	2239	1459	1750	3124	576	1750	3299	400	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.15	0.15	0.39	0.12	0.12	0.02	0.29	0.29	0.14	0.34	0.40
Crit Moves:		****		****								****
Green Time:	18.5	13.0	13.0	33.5	28.0	28.0	34.5	34.5	34.5	34.5	34.5	34.5
Volume/Cap:	0.38	1.04	1.04	1.04	0.38	0.38	0.05	0.75	0.75	0.35	0.89	1.04
Uniform Del:	30.8	38.5	38.5	28.3	24.2	24.2	17.4	24.0	24.0	19.8	26.0	27.7
IncremntDel:	0.7	49.7	49.7	46.0	0.2	0.2	0.0	2.3	2.3	0.3	7.4	45.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	31.5	88.2	88.2	74.3	24.4	24.4	17.5	26.2	26.2	20.1	33.4	73.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.5	88.2	88.2	74.3	24.4	24.4	17.5	26.2	26.2	20.1	33.4	73.2
HCM2k95th:	7	24	24	45	10	9	1	25	25	9	35	46

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Cumulative mitigation

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 Monterey Street / Tenth Street

Cycle (sec): 110 Critical Vol./Cap. (X): 0.857
Loss Time (sec): 12 (Y+R = 4 sec) Average Crit Del (sec/veh): 48.6
Optimal Cycle: 96 Level Of Service: D

Street Name:	Monterey Street						Tenth Street					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	1 0	2	0 1	2	0 1	1 0	1 0	1	1 0	1 0	2	0 1
Volume Module: >> Count Date: 11 May 2005 << 4:30 PM												
Base Vol:	128	184	66	153	181	62	30	512	99	49	697	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	184	66	153	181	62	30	512	99	49	697	166
Added Vol:	0	32	13	0	44	0	0	3	0	19	5	0
App trips+P:	8	120	140	524	144	6	3	433	16	170	600	532
Initial Fut:	136	336	219	677	369	68	33	948	115	238	1302	698
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	336	219	677	369	68	33	948	115	238	1302	698
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	336	219	677	369	68	33	948	115	238	1302	698
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	136	336	219	677	369	68	33	948	115	238	1302	698
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.83	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92
Lanes:	1.00	2.00	1.00	2.00	1.68	0.32	1.00	1.78	0.22	1.00	2.00	1.00
Final Sat.:	1750	3800	1750	3150	3124	576	1750	3299	400	1750	3800	1750
Capacity Analysis Module:												
Vol/Sat:	0.08	0.09	0.13	0.21	0.12	0.12	0.02	0.29	0.29	0.14	0.34	0.40
Crit Moves:			****	****				****		****		
Green Time:	17.3	16.1	16.1	27.6	26.3	26.3	8.5	36.9	36.9	17.5	45.8	73.4
Volume/Cap:	0.49	0.61	0.86	0.86	0.49	0.49	0.24	0.86	0.86	0.86	0.82	0.60
Uniform Del:	42.3	44.0	45.8	39.3	36.1	36.1	47.7	34.1	34.1	45.1	28.5	10.1
IncremntDel:	1.4	1.9	23.7	9.2	0.4	0.4	0.9	6.1	6.1	22.2	3.6	0.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	43.7	45.9	69.6	48.5	36.5	36.5	48.7	40.2	40.2	67.3	32.1	11.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.7	45.9	69.6	48.5	36.5	36.5	48.7	40.2	40.2	67.3	32.1	11.0
HCM2k95th:	8	10	15	24	13	13	3	33	33	19	36	24

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Cumulative mitigation

MITIG8 - CumlPM Wed Aug 17, 2005 10:28:44 Page 1-1

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 Monterey Street / Luchessa Avenue

Cycle (sec): 85 Critical Vol./Cap. (X): 0.829
Loss Time (sec): 12 (Y+R = 4 sec) Average Crit Del (sec/veh): 48.0
Optimal Cycle: 79 Level Of Service: D

Street Name:	Monterey Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Lanes:	2	0 2	0 1	1	0 2	0 1	1	0 2	0 1	1	0 0	1 0
Volume Module: >> Count Date: 11 May 2005 << 5:00 PM												
Base Vol:	275	227	105	67	326	43	36	57	179	155	92	85
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	275	227	105	67	326	43	36	57	179	155	92	85
Added Vol:	88	0	0	0	0	63	45	2	63	0	3	0
App trips+P:	140	72	6	7	92	250	200	100	150	25	130	29
Initial Fut:	503	299	111	74	418	356	281	159	392	180	225	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	503	299	111	74	418	356	281	159	392	180	225	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	503	299	111	74	418	356	281	159	392	180	225	114
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	503	299	111	74	418	356	281	159	392	180	225	114
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	1.00	0.66	0.34
Final Sat.:	3150	3800	1750	1750	3800	1750	1750	3800	1750	1750	1195	605
Capacity Analysis Module:												
Vol/Sat:	0.16	0.08	0.06	0.04	0.11	0.20	0.16	0.04	0.22	0.10	0.19	0.19
Crit Moves:	****					****	****				****	
Green Time:	16.4	21.9	21.9	15.3	20.9	20.9	16.5	24.5	24.5	11.3	19.3	19.3
Volume/Cap:	0.83	0.31	0.25	0.23	0.45	0.83	0.83	0.15	0.78	0.78	0.83	0.83
Uniform Del:	33.0	25.4	25.0	29.8	27.2	30.4	32.9	22.5	27.7	35.7	31.3	31.3
IncremntDel:	12.4	0.8	1.3	1.7	1.6	16.7	20.4	0.3	11.2	22.1	17.4	17.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	45.4	26.2	26.3	31.6	28.8	47.1	53.3	22.7	38.9	57.8	48.7	48.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.4	26.2	26.3	31.6	28.8	47.1	53.3	22.7	38.9	57.8	48.7	48.7
HCM2k95th:	16	7	5	4	9	17	14	3	18	12	19	19

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Cumulative Mitigation (Signal)

MITIG8 - CumlAM Wed Aug 17, 2005 10:13:52 Page 1-1

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Luchessa Avenue / Princevalle Street

Cycle (sec): 60 Critical Vol./Cap. (X): 0.602
Loss Time (sec): 8 (Y+R = 4 sec) Average Crit Del (sec/veh): 10.2
Optimal Cycle: 36 Level Of Service: B+

Street Name:	Princevalle Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	0	10	10	10	0	0	10	10
Lanes:	0 0	0	0 0	0 0	1!	0 0	0 1	0	0 0	0 0	0	1 0
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	0	0	0	64	0	120	116	244	0	0	292	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	64	0	120	116	244	0	0	292	103
Added Vol:	0	0	0	3	0	0	0	15	0	0	25	5
App trips+P:	0	0	0	1	0	10	11	350	0	0	250	1
Initial Fut:	0	0	0	68	0	130	127	609	0	0	567	109
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	68	0	130	127	609	0	0	567	109
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	68	0	130	127	609	0	0	567	109
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	68	0	130	127	609	0	0	567	109
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Lanes:	0.00	0.00	0.00	0.34	0.00	0.66	0.17	0.83	0.00	0.00	0.84	0.16
Final Sat.:	0	0	0	601	0	1149	311	1489	0	0	1510	290
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.11	0.00	0.11	0.41	0.41	0.00	0.00	0.38	0.38
Crit Moves:				****				****				
Green Time:	0.0	0.0	0.0	11.3	0.0	11.3	40.7	40.7	0.0	0.0	40.7	40.7
Volume/Cap:	0.00	0.00	0.00	0.60	0.00	0.60	0.60	0.60	0.00	0.00	0.55	0.55
Uniform Del:	0.0	0.0	0.0	22.3	0.0	22.3	5.2	5.2	0.0	0.0	5.0	5.0
IncremntDel:	0.0	0.0	0.0	3.1	0.0	3.1	0.9	0.9	0.0	0.0	0.6	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	25.4	0.0	25.4	6.1	6.1	0.0	0.0	5.5	5.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	25.4	0.0	25.4	6.1	6.1	0.0	0.0	5.5	5.5
HCM2k95th:	0	0	0	9	0	9	15	15	0	0	13	13

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Cumulative mitigation (signal)

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 Luchessa Avenue / Princevalle Street

Cycle (sec):	60	Critical Vol./Cap. (X):	0.747
Loss Time (sec):	8 (Y+R = 4 sec)	Average Crit Del (sec/veh):	11.9
Optimal Cycle:	49	Level Of Service:	B+

Street Name:	Princevalle Street						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	0	10	10	10	0	0	10	10
Lanes:	0 0	0	0 0	0 0	1! 0	0	0 1	0	0 0	0 0	0 1	0
Volume Module: >> Count Date: 11 May 2005 << 4:30 PM												
Base Vol:	0	0	0	69	0	67	54	218	0	0	227	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	69	0	67	54	218	0	0	227	108
Added Vol:	0	0	0	8	0	0	0	45	0	0	38	7
App trips+P:	0	0	0	14	0	20	20	370	0	0	600	2
Initial Fut:	0	0	0	91	0	87	74	633	0	0	865	117
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	91	0	87	74	633	0	0	865	117
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	91	0	87	74	633	0	0	865	117
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	0	0	0	91	0	87	74	633	0	0	865	117
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.92	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Lanes:	0.00	0.00	0.00	0.51	0.00	0.49	0.10	0.90	0.00	0.00	0.88	0.12
Final Sat.:	0	0	0	895	0	855	188	1612	0	0	1586	214
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.10	0.39	0.39	0.00	0.00	0.55	0.55
Crit Moves:				****							****	
Green Time:	0.0	0.0	0.0	10.0	0.0	10.0	42.0	42.0	0.0	0.0	42.0	42.0
Volume/Cap:	0.00	0.00	0.00	0.61	0.00	0.61	0.56	0.56	0.00	0.00	0.78	0.78
Uniform Del:	0.0	0.0	0.0	23.2	0.0	23.2	4.4	4.4	0.0	0.0	5.9	5.9
IncremntDel:	0.0	0.0	0.0	3.8	0.0	3.8	0.6	0.6	0.0	0.0	3.2	3.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	26.9	0.0	26.9	5.0	5.0	0.0	0.0	9.1	9.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	26.9	0.0	26.9	5.0	5.0	0.0	0.0	9.1	9.1
HCM2k95th:	0	0	0	8	0	8	13	13	0	0	25	25

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Cumulative analysis (roundabout)

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

****

Intersection #1 Luchessa Avenue / Thomas Road

****

Average Delay (sec/veh): 23.7 Level Of Service: C

****

Street Name:	Thomas Road						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	1			0			1			1		
Volume Module: >> Count Date: 11 May 2005 << 4:30PM												
Base Vol:	11	0	239	0	0	0	0	30	5	266	38	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	11	0	239	0	0	0	0	30	5	266	38	0
Added Vol:	0	0	34	0	0	0	0	12	0	29	9	0
App trips+P:	40	0	175	0	0	0	0	390	38	195	620	0
Initial Fut:	51	0	448	0	0	0	0	432	43	490	667	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	51	0	448	0	0	0	0	432	43	490	667	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	0	448	0	0	0	0	432	43	490	667	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	51	0	448	0	0	0	0	432	43	490	667	0
PCE Module:												
AutoPCE:	51	0	448	0	0	0	0	432	43	490	667	0
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	0	0	0	0	0	0	0	0	0
AdjVolume:	51	0	448	0	0	0	0	432	43	490	667	0

Delay Module: >> Time Period: 0.25 hours <<				
CircVolume:	432	1208	490	51
MaxVolume:	967	xxxxxx	935	1172
PedVolume:	0	0	0	0
AdjMaxVol:	967	xxxxxx	935	1172
ApproachVol:	499	xxxxxx	475	1157
ApproachDel:	7.6	xxxxxx	7.8	37.1
Queue:	3.0	xxxx	2.9	19.9

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Cumulative mitigation (roundabout)

Level Of Service Computation Report
FHWA Roundabout Method (Future Volume Alternative)

****

Intersection #1 Luchessa Avenue / Thomas Road

****

Average Delay (sec/veh): 7.6 Level Of Service: A

****

Street Name:	Thomas Road						Luchessa Avenue					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Yield Sign			Yield Sign			Yield Sign			Yield Sign		
Lanes:	1			0			1			1		
Volume Module: >> Count Date: 11 May 2005 << 7:30 AM												
Base Vol:	8	0	322	0	0	0	0	39	14	400	16	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	0	322	0	0	0	0	39	14	400	16	0
Added Vol:	0	0	11	0	0	0	0	4	0	17	8	0
App trips+P:	20	0	163	0	0	0	0	360	25	59	230	0
Initial Fut:	28	0	496	0	0	0	0	403	39	476	254	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	0	496	0	0	0	0	403	39	476	254	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	28	0	496	0	0	0	0	403	39	476	254	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	28	0	496	0	0	0	0	403	39	476	254	0
PCE Module:												
AutoPCE:	28	0	496	0	0	0	0	403	39	476	254	0
TruckPCE:	0	0	0	0	0	0	0	0	0	0	0	0
ComboPCE:	0	0	0	0	0	0	0	0	0	0	0	0
BicyclePCE:	0	0	0	0	0	0	0	0	0	0	0	0
AdjVolume:	28	0	496	0	0	0	0	403	39	476	254	0

Delay Module: >> Time Period: 0.25 hours <<				
CircVolume:	403	758	476	28
MaxVolume:	982	xxxxxx	943	1185
PedVolume:	0	0	0	0
AdjMaxVol:	982	xxxxxx	943	1185
ApproachVol:	524	xxxxxx	442	730
ApproachDel:	7.8	xxxxxx	7.1	7.8
Queue:	3.2	xxxx	2.5	4.5

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APPENDIX C:
APPROVED AND PENDING PROJECT

Updated: 4/21/05

Trip Generation for Approved and Proposed Developments

Project Name	(A)pproved / (P)roposed	Size / Unit	Location	Use	AM Peak Hour						PM Peak Hour					
					Rate	Splits In	Splits Out	Trips Total	Trips In	Trips Out	Rate	Splits In	Splits Out	Trips Total	Trips In	Trips Out
								0	0	0				0	0	0
Afonso Almeida	A	6940 sf 12 units	7660 Monterey	retail/office 12 units				12	5	7				32	16	22
American West	A	3640 sf retail	7660 Monterey St.	retail				4	2	2				14	7	7
Arroyo Circle Industrial	A	36,000 square feet	NE corner of Camino Arroyo and Arroyo Circle	Industrial Park				112	93	19				115	24	91
Benassi-residential	A	24	SE corner of Santa Teresa and Hecker Pass	homes				18	5	13				24	16	8
Bertolone Retail/Residential	A	12 apartment 4150 retail	7433 Monterey St.	mixed use / commercial / residential				7	5	2				28	13	15
Brownfield, Michael	A	4000 sf retail 3200 sf office	7463 Monterey St.	retail/office				16	14	2				98	21	77
Carriage Hills III	A	39 homes	n/o Mantelli, w/o Ranch Hills	homes	From Higgins file.			29	7	22				39	25	14
Carriage Hills IV	A	48	n/o Mantelli, w/o Ranch Hills	townhomes	From Higgins file.			22	4	18				27	18	9
Carriage Park	A	18 homes	240 Farrell Ave	sf detached housing				14	3	11				18	12	6
Christopher	A	12 homes	w/o Mesa near Thomas	homes	From Higgins file.			9	2	7				12	8	4
Civic Center Expansion	A	100 ksf	Rosanna @ Sixth					209	164	45				502	197	305
Country Estates III	A	67	W. end of Mantelli, west of Santa Teresa	sf detached housing		25%	75%	56	14	42		64%	36%	75	48	27
David Nader	A	10125 sf	7840 Monterey	retail/office				21	6	13				185	60	122
Deer Park / Ranch Hills	A	150 homes	N. end of Rancho Hills and W. end of Sunrise	homes				113	28	85				152	97	55
Eagle Ridge	A	324	W. side of Santa Teresa, S. of Uvas Creek	sf detached housing		25%	75%	236	59	177		64%	36%	310	198	111
Fortino	A	12 homes	Mesa Road	sf detached housing				9	2	7				12	8	4
Fourth Street Commons	A	8000 sf	SW corner Monterey & Fourth	retail office				8	5	3				119	57	62
Gilroy Crossing-Regency	A	20 ksf	e/o Brem Lane, s/o Hwy 152	commercial				61	37	24				217	104	113
Gilroy Reception Cntr	A	mixed use	n/o Farrell, w/o Monterey	mixed use				0						0		
Gilroy USA-GUSD	A	33 homes	NE corner of Kern and Mantelli	homes	From Higgins file.			25	6	19				33	21	12
Hollyhock Hills	A	29 homes	Hollyhock Lane	sf detached housing				22	5	17				19	10	29
Hwy 152 Retail Cntr-Newman	A	20,000 sf commercial	e/o Rentz Lane, n/o Hwy 152	Shopping Center	From Higgins file.			21	13	8				217	104	113

Updated: 4/21/05

Trip Generation for Approved and Proposed Developments

Project Name	(A)pproved / (P)roposed	Size / Unit	Location	Use	AM Peak Hour						PM Peak Hour					
					Rate	Splits In	Splits Out	Trips Total	Trips In	Trips Out	Rate	Splits In	Splits Out	Trips Total	Trips In	Trips Out
								0	0	0				0	0	0
Land Capital Group	A	117,521	SE c/o Hwy 152 and Camino Arroyo	Commercial shopping center				176	107	69				700	335	364
Las Animas Industrial	A	41,234 sf	SE corner of Las Animas & Monterey	Industrial Park				38	33	5				40	5	35
McCarthy - Commercial	A	16 acres	S. side of Hwy. 152 East, E. of Silacci	Shopping Center				222	136	87				679	326	353
McCarthy - Industrial	A	73.4 acres	S. side of Hwy. 152 East, E. of Silacci	Industrial Park		83%	17%	647	537	110		21%	79%	630	132	498
Mesa Ridge	A	60 homes	Mesa Road	sf detached housing				45	11	34				61	39	22
Oak Commons	A	137 Residential	E side of Wren, S. of First	Res. Townhomes		17%	83%	66	11	55		67%	33%	80	53	26
Ramada Inn	A	96 Rooms	Travel Park Circle	hotel	From Higgins file.			64	37	27				68	33	35
Redline Corporation	A	6 homes	kern Ave.	sf detached housing				7	2	5				9	6	3
Riverbend	A	12 units	Kern Ave	sf detached housing				9	2	7				12	8	4
South Valley Disposal & Recycling	A	Reuse of an existing facility	1351 Pacheco Pass Highway	Corporation yard for a garbage and recycling company				0	0	0				0	0	0
South Valley Technology Park	A	29.7 acres	Monterey Road s/o Travel Park Crc.	industrial				302	251	51				310	65	245
Sports Complex	A	2 fields	Monterey Frontage Road, S. of West Luchessa		From Higgins file.			8	4	4				64	56	8
Su Casa	A	11,500	NW corner Monterey & Fourth	office				43	39	4				53	8	45
Suner (Ervin Ct.)	A	12 homes	Monterey St. & Ervin Ct.	sf detached housing				9	2	7				12	8	4
Suner (Masoni Orchard)	A	14 homes	sw c/o Miller & Santa Teresa	sf detached housing				11	3	8				14	9	5
The Forest	A	12 homes	W. of Rancho Real, N. of Hecker Pass	sf detached housing	From Higgins file.			9	2	7				12	8	4
Village Green Senior Facility	A	mixed use	SW corner of Santa Teresa and Hecker Pass	mixed use	From Higgins file.			103	54	49				203	102	101
Vince Giancola	A	30,0000 SF industrial	south end end of Obata Way (s/o Luchessa)	Industrial				27	24	3				29	3	26
Vineyards	A	170 apartments	e/o Wren, s/o First St	apartments		16%	84%	85	14	71		67%	33%	111	74	37
Volrath	A	18,900 sf industrial	Forest st, n/o Leavesley	Industrial				17	15	2				19	2	17
Wal-Mart	A	219,622 sf	n/e c/o Renz Lane and Camino Arroyo	Retail				404	206	198				755	369	386

Updated: 4/21/05

Trip Generation for Approved and Proposed Developments

Project Name	(A)pproved / (P)roposed	Size / Unit	Location	Use	AM Peak Hour						PM Peak Hour					
					Splits			Trips			Splits			Trips		
					Rate	In	Out	Total	In	Out	Rate	In	Out	Total	In	Out
								0	0	0				0	0	0
Walnut Court	A	12 homes	Kern Ave	sf detached housing				9	2	7				12	8	4
Walnut park	A	31	Kern Ave	sf detached housing				23	6	17				31	20	11
Benassi-commercial	P	7.4 acres commercial	SE corner of Santa Teresa and Hecker Pass	Shopping Center	From Higgins file.			126	77	49				401	193	208
Benassi-residential	P	80	SE corner of Santa Teresa and Hecker Pass	apartments				41	7	34				50	33	17
Bertolone Hotel	P	28 room hotel	8435 & 8445 Murray Ave.	Commercial Hotel				16	10	6				17	9	8
Bonfante Gardens (20% of original)	P	54 acres	S. side of Hecker Pass, @ Burchell	* Trips from Higgins Study				16	13	3				66	22	44
Camino Enterprises	P	17 Homes	S. of Sunrise at Sprig Way	sf detached housing				13	3	10				17	11	6
China Town Shopping Center	P	5 acres	San Ysidro (next to Home Depot lot)	commercial	From Higgins file.			259	151	108				531	257	274
Country Estates IV	P	95	W. end of Mantelli, west of Santa Teresa	sf detached housing		25%	75%	76	19	57		64%	36%	103	66	37
Deer Park	P	71	West side of Rancho Hills Drive, north of Longmeadow	homes				53	13	40				72	46	26
Deer Park / Ranch Hills Phase II	P	107 homes	NW c/o Santa Teresa and Sunrise Drive	homes				80	20	60				108	69	39
Eagle Ridge	P	12 homes	w/o Santa Teresa, n/o Miller	homes	From Higgins file.			9	7	2				12	8	4
Eleventh Street Commons	P	15 Office @ 2000 SF/ 70 dwelling units	Monterey Street opposite Eleventh Street	mixed use office/residential on 7 acres				83	47	36				89	38	51
Filice/McCormack	P	15 homes	S/E c/o Miller & Santa Teresa	sf detached housing				11	3	8				15	10	5
First Street Commercial	P	60 ksf	NE corner of Wren and First Street	commercial	From Higgins file.			77	47	30				291	140	151
Fortino Office Building	P	7,500 s.f.	1355 first Street	medical office building				19	15	4				28	8	20
Gilroy Cutural/Performing Arts Center	P	28,000 SF/500 seats	7341 Monterey Street	Theater / banquet				37	24	13				49	17	32
Gilroy USA-Wren	P	192 homes	n/o Tatum between Kern and Wren	homes	From Higgins file.			144	36	108				194	124	70
Glen Loma Specific Plan	P	670 homes	e/o Miller, n/o Santa Teresa	homes				496	362	134				670	442	228
Glen Loma Specific Plan	P	360 apartments	e/o Miller, n/o Santa Teresa	apartments				254	40	214				316	214	102

Updated: 4/21/05

Trip Generation for Approved and Proposed Developments

Project Name	(A)pproved / (P)roposed	Size / Unit	Location	Use	AM Peak Hour						PM Peak Hour					
					Rate	Splits In	Splits Out	Trips Total	Trips In	Trips Out	Rate	Splits In	Splits Out	Trips Total	Trips In	Trips Out
								0	0	0				0	0	0
Glen Loma Specific Plan	P	150 Senior Apartments	e/o Miller, n/o Santa Teresa	apartments												
Glen Loma Specific Plan	P	90 ksf commercial	e/o Miller, n/o Santa Teresa	commercial				89	55	34				356	171	185
GUSD	P	6 Homes	NE corner Wren and Vickery	sf detached housing				5	1	4				6	4	2
Hecker Pass Specific Plan	P	506 homes	s/o Hecker pass, w/o Santa Teresa	homes	From Higgins file.			359	90	269				484	310	174
Hecker Pass Specific Plan	P	mixed use	s/o Hecker pass, w/o Santa Teresa	mixed use	From Higgins file.			114	56	58				80	43	37
Lewis St. Partners	P	12 units 7000 SF retail	s/e c/o Lewis St. & Monterey St.	Apartments				16	5	11				51	30	21
Lulevitt	P	10 residential, 5890 SF retail	Monterey St. & 10th St.	mixed use				8	4	4				26	13	13
Machado	P	59.7 acres	NE corner of Camino Arroyo and Hwy 152	Commercial and Industrial Development				607	504	103				625	131	494
Martin Industrial	P	8 acres	SE c/o Las Animas & Monterey	8 industrial lots				82	68	14				84	18	66
Masoni Vineyard	P	8 homes	NW c/o Santa Teresa and Thomas Road	sf detached housing				6	2	4				8	5	3
Mussallem	P	6 homes	Miller Ave & First St.	sf detached housing				5	1	4				6	4	2
New Hope Church	P	25 ksf	Greenfield Drive	Church				18	10	8				17	9	8
Newman Industrial	P	10 acres	Renz Lane, east of Camino Arroyo	Industrial				75	62	13				73	16	57
North Forest Commercial	P	60 ksf	NE corner of Forest and Leavesley	commercial	From Higgins file.			118	72	46				448	215	233
North Forest Industrial	P	5 acres	North Forest St., N. of Leavesley	Industrial Park	From Higgins file.			51	42	9				52	11	41
Obata Industrial Park	P	8 acres remaining	E. of Rossi, S. of Mayock	Industrial Park	From Higgins file.			75	62	13				73	16	57
Oliveri	P	18,800 s.f. commercial, 20 apartments, 16 duette units	9425 Monterey Road (North of Farrell Ave.)	Retail/homes				30	15	25				108	60	48
Rancho Meadows	P	16 homes	S. of Sunrise at Cheyenne	sf detached housing				12	3	9				16	10	6
Regency Centers	P	17.3	s/e c/o Camino Arroyo & Hwy 152	commercial and industrial				176	146	30				181	38	143
Rossi Industrial	P	26 ksf	Rossi Lane	Industrial				24	21	3				25	3	22

Updated: 4/21/05

Trip Generation for Approved and Proposed Developments

Project Name	(A)pproved / (P)roposed	Size / Unit	Location	Use	AM Peak Hour						PM Peak Hour					
					Rate	Splits In	Splits Out	Trips Total	Trips In	Trips Out	Rate	Splits In	Splits Out	Trips Total	Trips In	Trips Out
								0	0	0				0	0	0
Santa Clara Valley Health	P	3.7 acres/60k sf	Arroyo Circle, N. of Gilman	Business park				107	80	22				100	43	57
SCH Cannery Project	P	40000 SF Office / 206 residential	N. of Railroad and Lewis St.	mixed use office/residential on 13 acres				162	71	91				184	94	90
Silveira Ranch	P	50-acre GUSD High School, 10 acre Catholic Church and School	SW c/o Day Road & Santa Teresa	50-acre GUSD High School, 10 acre Catholic Church and School				616	323	293				244	121	123
South Valley Community Church	P	20 acres	s/o Hecker pass, w/o Santa Teresa	Church and School facility	From Higgins TIA			896	348	548				892	460	432
South Valley Disposal	P	17 acres	Hwy 152	Transfer Station				0	0	0				0	0	0
Southpoint Business Park	P	64	Arroyo Circle, N. of Gilman	Business park	From Higgins file.			763	633	130				785	165	620
Sports Complex	P	8 fields	Monterey Frontage Road, S. of West Luchessa		From Higgins file.			32	16	16				256	224	32
Suner (9025 Kern Ave)	P	12 homes	9025 Kern ave	residential				9	2	7				12	8	4
Suner (Lone Oak Ct.)	P	6 units	Lone Oak Ct.	sf detached housing				5	1	4				6	4	2
Suner (Masoni Vineyard)	P	12 homes	ne c/o Miller & Santa Teresa	sf detached housing				9	2	7				12	8	4
Tosco Commercial	P	35 ksf	SE corner of Santa Teresa and Hecker Pass	commercial	From Higgins file.			52	32	20				166	80	86
Chang	P (51)	51 homes	N. of Longmeadow, west of Santa Teresa	sf detached housing	From Higgins file.			39	10	29				52	33	19
Silacci Business Park	P A	13.5 ac. remaining	Silacci Way, S. of Hwy. 152 East	Business Park	From Higgins file.			137	114	23				141	30	111

Source: City of Gilroy Planning Division Staff

APPENDIX D:
PEAK-HOUR SIGNAL WARRANT ANALYSIS

FEHR & PEERS
TRANSPORTATION CONSULTANTS

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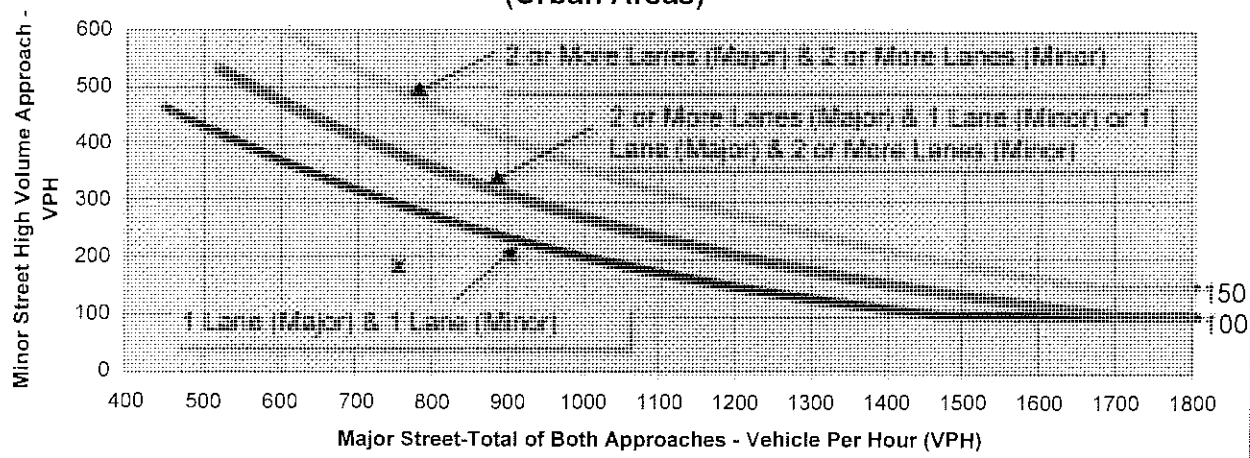
Figure 9-8
PEAK HOUR VOLUME WARRANT
(Urban Areas)



*Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.
Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	NO
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		755	184	
*Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.				

- Existing Conditions
- Existing Plus Project Conditions
- Cumulative No Project Conditions
- Cumulative Plus Project Conditions

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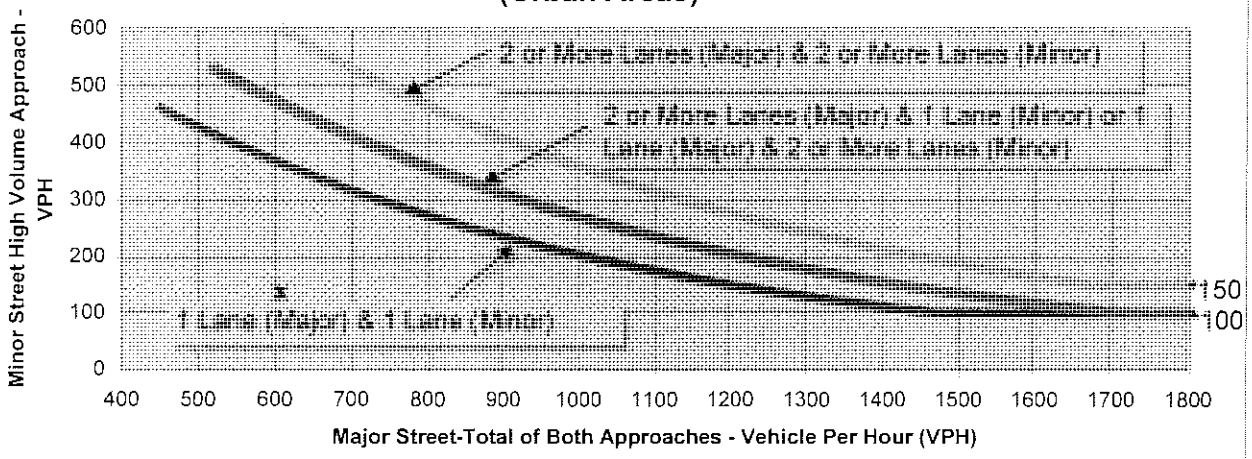

*Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	NO
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		607	136	

*Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

- Existing Conditions
- Existing Plus Project Conditions
- Cumulative No Project Conditions
- Cumulative Plus Project Conditions

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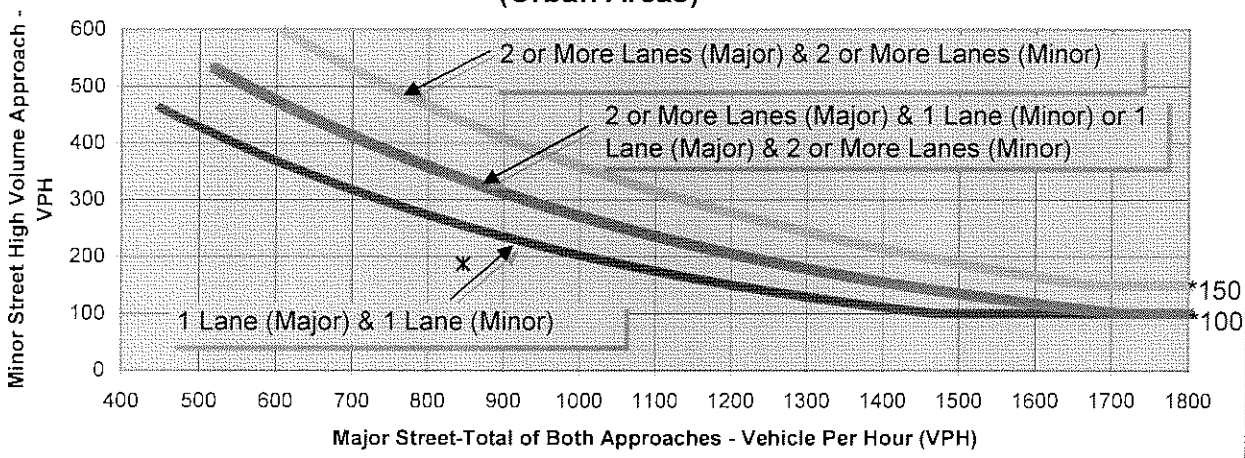

*Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	NO
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		847	187	

*Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

- ☐ Existing Conditions
- ☐ Existing Plus Project Conditions
- ☐ Cumulative No Project Conditions
- ☐ Cumulative Plus Project Conditions

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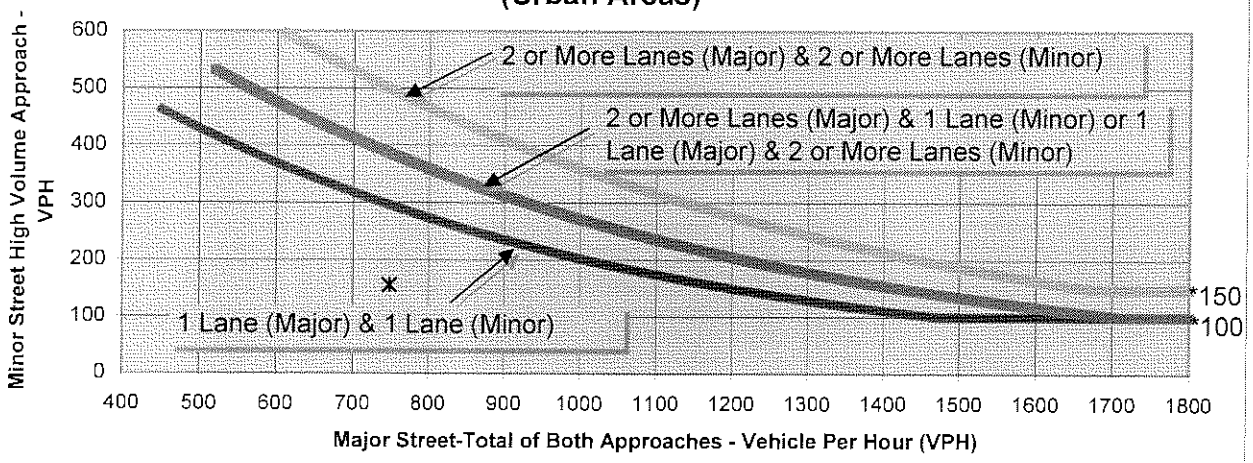

*Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.
Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	NO
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		748	156	

*Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

- Existing Conditions
- Existing Plus Project Conditions
- Cumulative No Project Conditions
- Cumulative Plus Project Conditions

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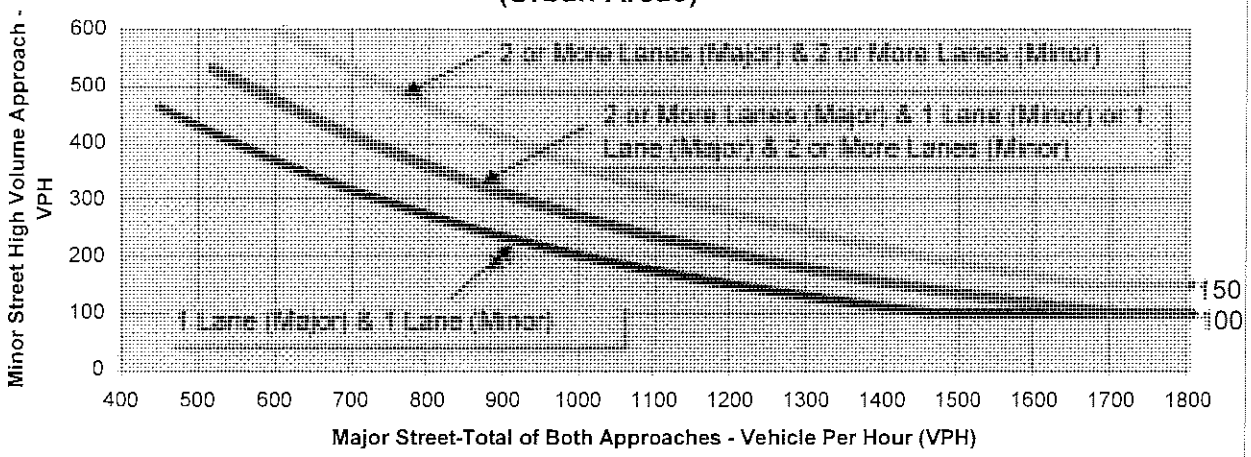

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Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	NO
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		892	190	

*Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

- ☐ Existing Conditions
- ☐ Existing Plus Project Conditions
- ☐ Cumulative No Project Conditions
- ☐ Cumulative Plus Project Conditions

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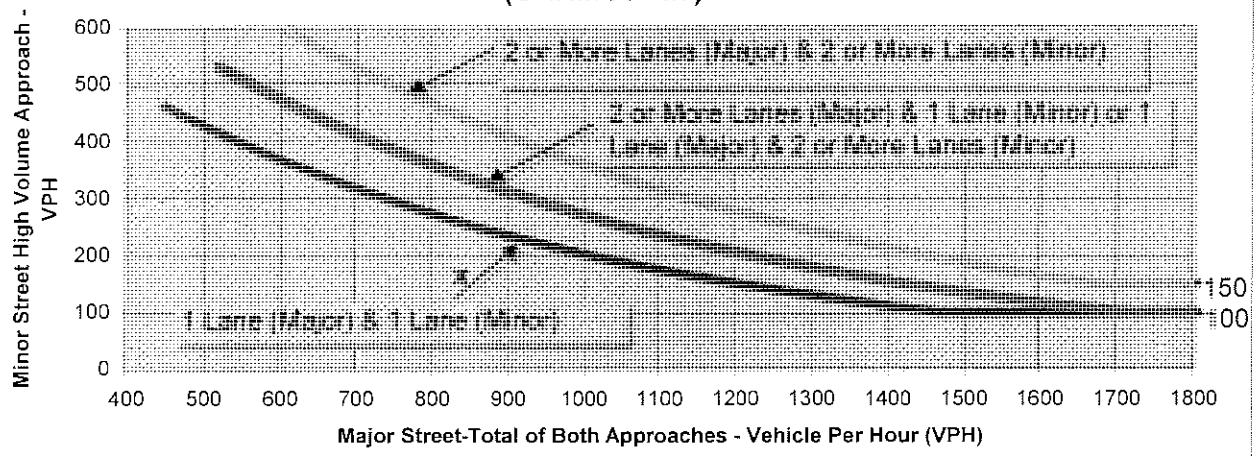

*Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	NO
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		838	164	

*Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

- ☐ Existing Conditions
- ☐ Existing Plus Project Conditions
- ☐ Cumulative No Project Conditions
- ☐ Cumulative Plus Project Conditions

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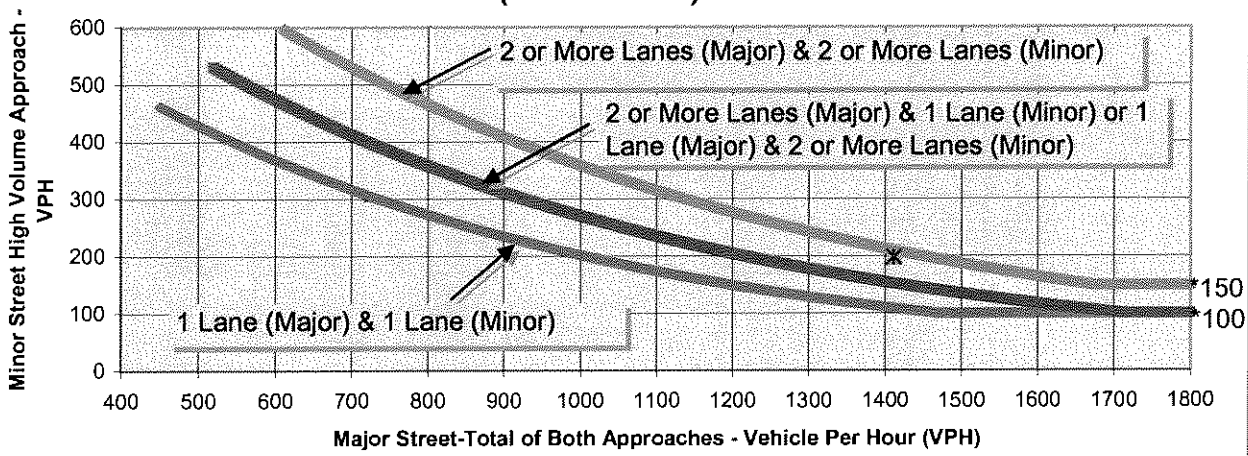

*Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.
Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	YES
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		1412	198	
*Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.				

- ☐ Existing Conditions
- ☐ Existing Plus Project Conditions
- ☐ Cumulative No Project Conditions
- ☐ Cumulative Plus Project Conditions

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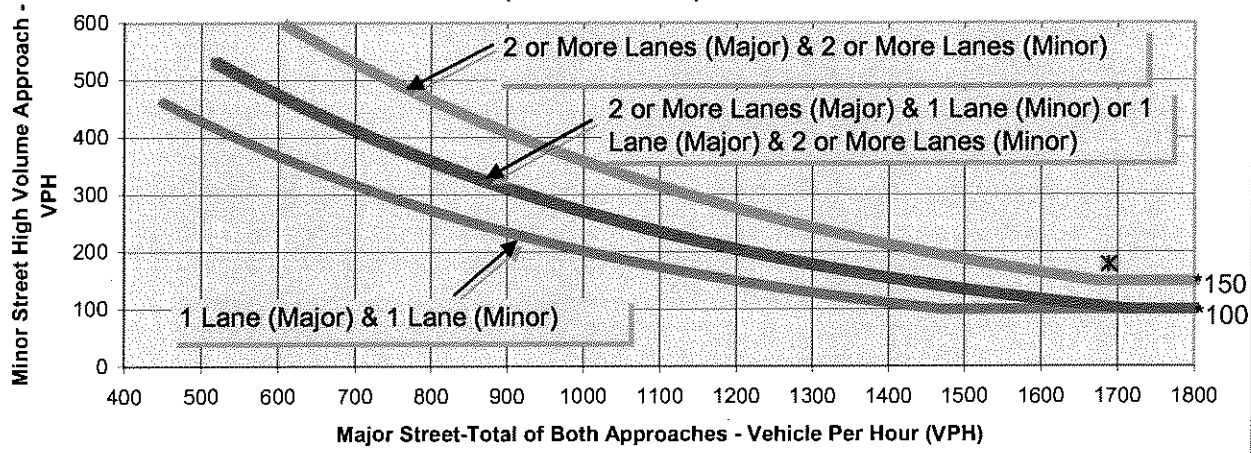

*Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.
Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	YES
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		1689	178	

*Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

- ☐ Existing Conditions
- ☐ Existing Plus Project Conditions
- ☐ Cumulative No Project Conditions
- ☐ Cumulative Plus Project Conditions

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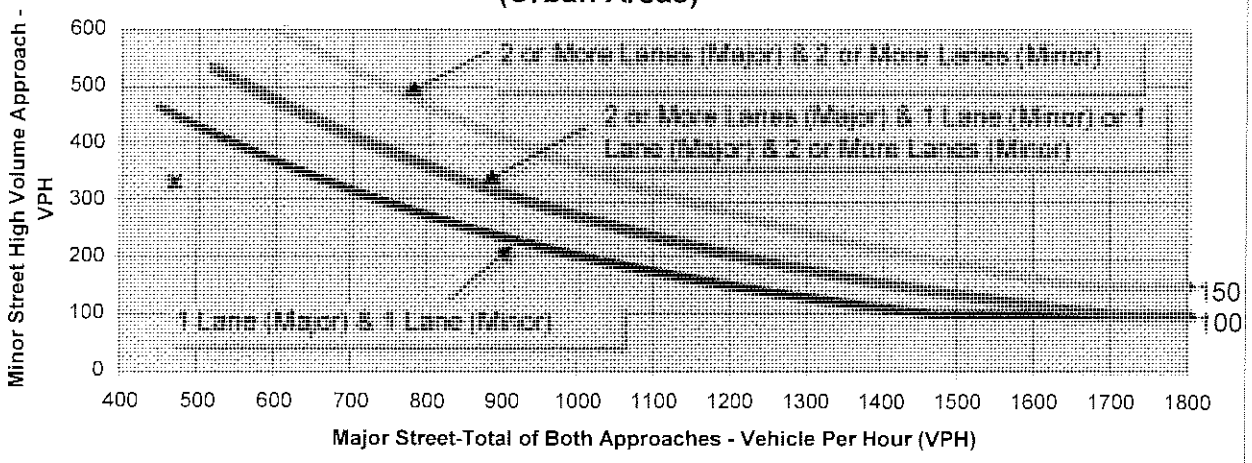

*Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.
Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	NO
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		469	330	
*Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.				

- [x] Existing Conditions
- [ ] Existing Plus Project Conditions
- [ ] Cumulative No Project Conditions
- [ ] Cumulative Plus Project Conditions

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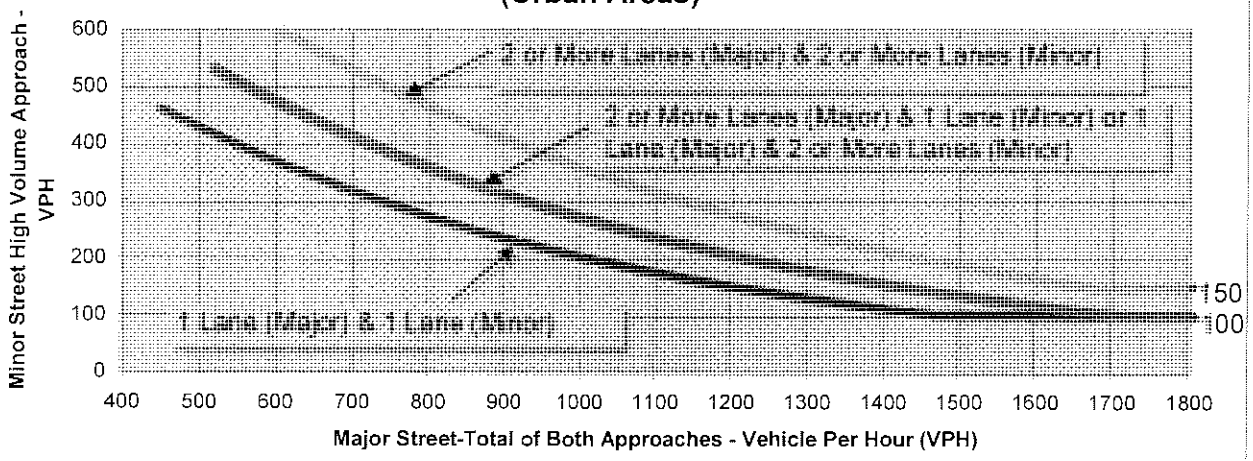

*Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	NO
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		339	250	

*Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

- [x] Existing Conditions
- [ ] Existing Plus Project Conditions
- [ ] Cumulative No Project Conditions
- [ ] Cumulative Plus Project Conditions

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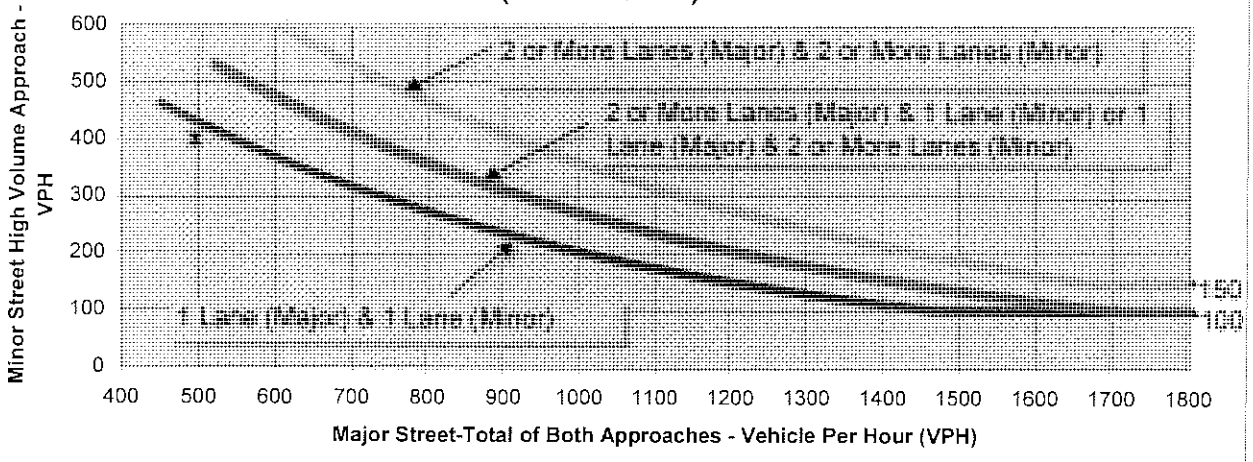

*Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.
Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	NO
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		494	400	

*Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

- [x] Existing Conditions
- [ ] Existing Plus Project Conditions
- [ ] Cumulative No Project Conditions
- [ ] Cumulative Plus Project Conditions

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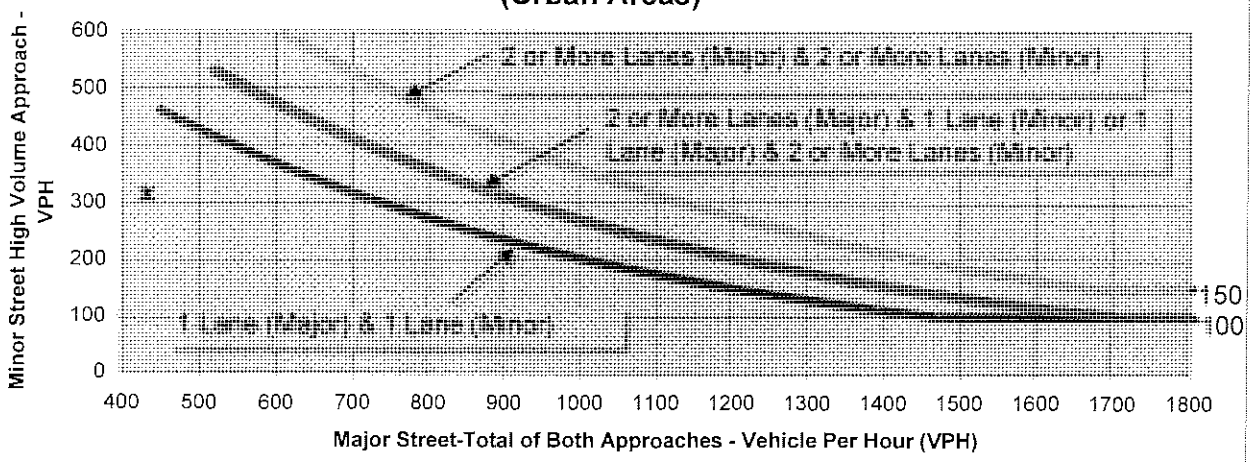

*Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	NO
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		432	315	
*Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.				

- [x] Existing Conditions
- [ ] Existing Plus Project Conditions
- [ ] Cumulative No Project Conditions
- [ ] Cumulative Plus Project Conditions

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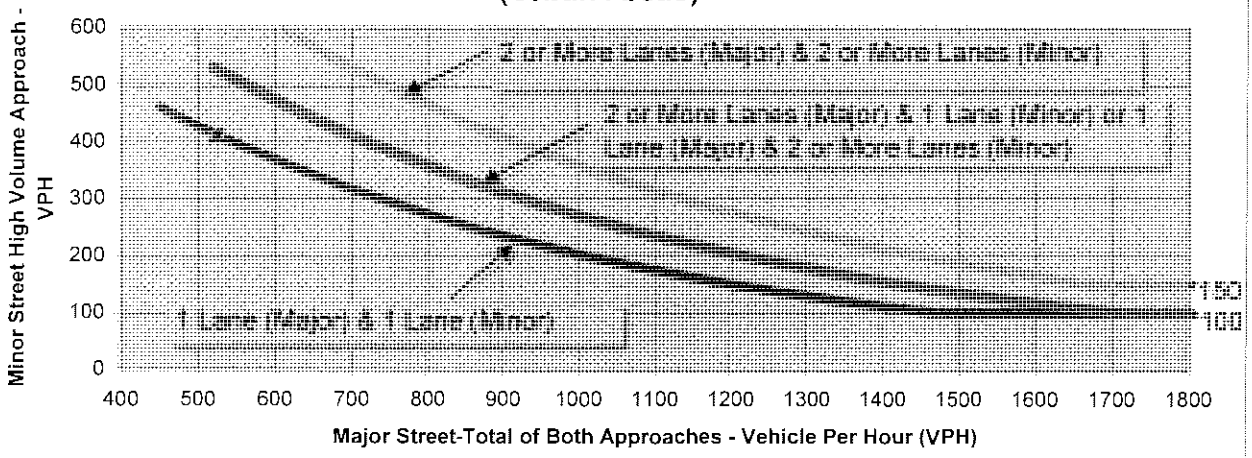

*Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	NO
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		523	411	

*Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

- ☐ Existing Conditions
- ☐ Existing Plus Project Conditions
- ☐ Cumulative No Project Conditions
- ☐ Cumulative Plus Project Conditions

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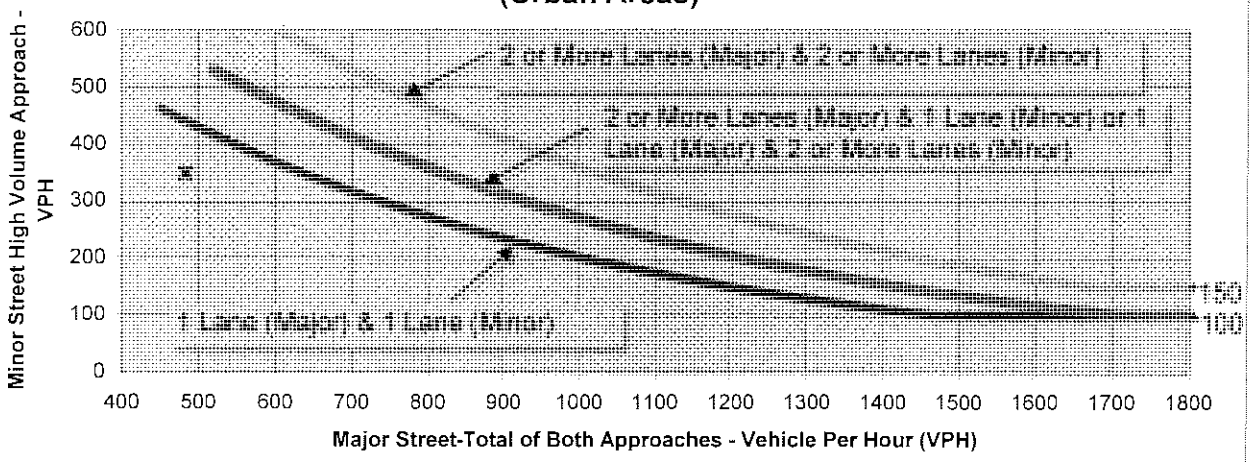

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Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	NO
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		482	349	

*Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

- ☐ Existing Conditions
- ☐ Existing Plus Project Conditions
- ☐ Cumulative No Project Conditions
- ☐ Cumulative Plus Project Conditions

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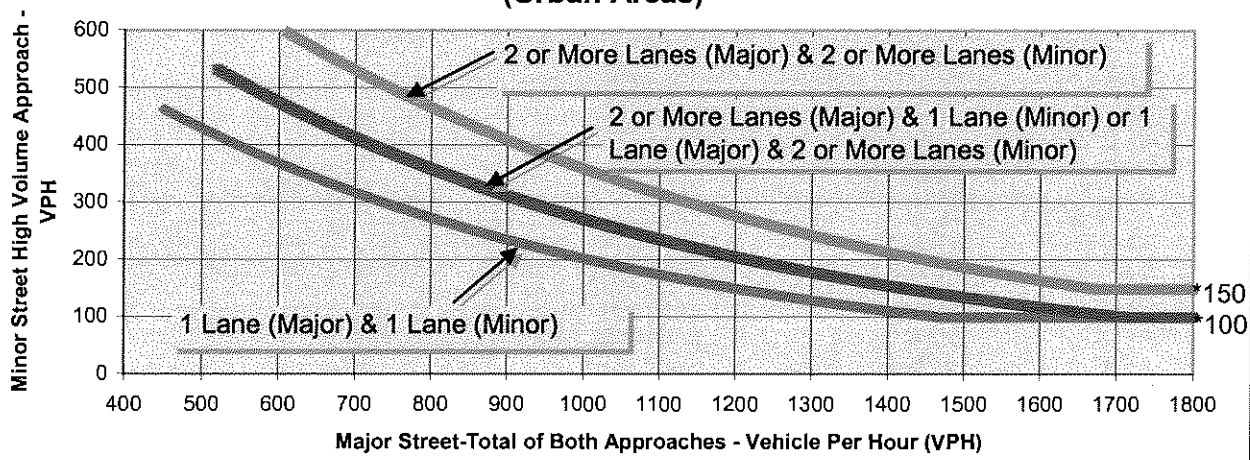

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Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	YES
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		1172	524	

*Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

- ☐ Existing Conditions
- ☐ Existing Plus Project Conditions
- ☐ Cumulative No Project Conditions
- ☐ Cumulative Plus Project Conditions

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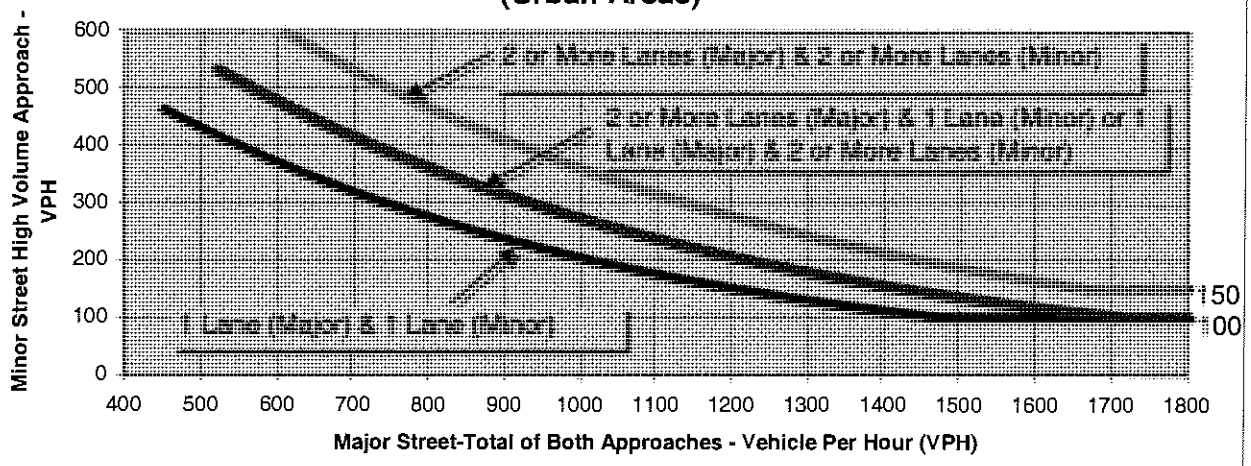

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Source: Traffic Manual, Caltrans 1996.

Name of Street		Major Street	Minor Street	Warrant Met
Number of Lanes	Two or More Lane (Y/N)	n	n	YES
	One Lane (Y/N)	y	y	
Traffic Volume (VPH) *		1632	499	

*Note: Traffic Volume for Major Street is Total Volume of Both Approches.
Traffic Volume for Minor Street is the Volume of High Volume Approach.

- ☐ Existing Conditions
- ☐ Existing Plus Project Conditions
- ☐ Cumulative No Project Conditions
- ☐ Cumulative Plus Project Conditions