

GENTRY - SUISUN

SCH# 2004092077

VOLUME II

TECHNICAL APPENDICES

PREPARED FOR
THE CITY OF SUISUN CITY
Jake Raper,
Community Development Director
(707) 421-7396

APRIL 2006

PREPARED BY
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Volume II

Gentry-Suisun Project Draft Environmental Impact Report

Appendices

- A. Notice of Preparation
- B. Comments on the Notice of Preparation
- C. Initial Study
- D. Air Quality Impact Evaluation for Gentry/Suisun Annexation Project.
Prepared by Don Ballanti
- E. Acoustical Assessment of the Proposed Suisun-Gentry Mixed Use
Development. Prepared by J.C. Brennan and Associates, Inc.
- F. Gentry Suisun Traffic Study, prepared by Fehr & Peers, Inc
- G. Biological Resources Assessment. Prepared by Foothill Associates.
- H. Gentry-Suisun Mixed Use Project: Economic Impact Analysis, Suisun
City California, prepared by Sedway Group

APPENDIX A

DATE: September 16, 2004

TO: Responsible Agencies, Trustee Agencies, and Interested Persons

FROM: Gerry Raycraft, Community Development Director
City of Suisun City

**SUBJECT: NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT
FOR THE PROPOSED GENTRY PROPERTY ANNEXATION**

The City of Suisun City, Community Development Department is the lead agency for the preparation of an Environmental Impact Report (EIR) for the proposed annexation of the Gentry Property ("proposed project"). Suisun City has directed the preparation of this EIR in compliance with the California Environmental Quality Act (CEQA). The Gentry Annexation EIR is also being prepared to satisfy the annexation report requirement within Sections 17.52.010- .050, of the Municipal Code of the City of Suisun City relating to Annexations.

Once a decision is made to prepare an EIR, the lead agency must prepare a NOP to inform all responsible and trustee agencies that an EIR will be prepared (CEQA Guidelines Section 15082). The purpose of the NOP is to provide agencies with sufficient information describing both the proposed project and the potential environmental effects to enable the agencies to make a meaningful response as to the scope and content of the information to be included in the EIR. Suisun City is also soliciting comments on the scope of the EIR from interested persons.

SCOPING MEETING

A public scoping meeting conducted by the Planning Commission will be held regarding the proposed EIR for the Gentry Property Annexation on September 28, 2004, from 6pm-7pm at the Suisun City Council Chambers located at 701 Civic Center Boulevard, Suisun City, CA 94585.

PROJECT DESCRIPTION

Project Location

The proposed project site consists of approximately 167.6 acres currently within the jurisdiction of Solano County. Located nearly 45 miles northeast of San Francisco and 45 miles southwest of the City of Sacramento, Solano County is bordered by Napa, Yolo, San Joaquin, and Contra Costa Counties and covers 823 square miles, about half of which lies in the Sacramento Valley. The project site is located within the Suisun City Sphere of Influence (SOI).

A small California community of 27,000 residents, Suisun City is situated in central Solano County. The City is located on the Suisun Channel, which connects with Suisun and Grizzly Bays and links the City with the Sacramento River and the San Francisco Bay. Although the northeast corner of the project site crosses into the Suisun City limits, the majority of the project area is located west of the Suisun City limits in the northwest corner of a junction in the Union Pacific Railroad (UPRR) tracks. Pennsylvania Avenue, south of State Route (SR) 12, diagonally transects the approximate center of the project area in a northeast/southwest direction. The surrounding areas of the project site are as follows:

To the North

- State Route 12

To the Northwest

- Fairfield City limits

To the South

- UPRR tracks
- Pennsylvania Avenue intersects with Cordelia Road
- Cordelia Road (runs parallel to UPRR tracks)

To the Southwest

- UPRR tracks
- Cordelia Road at the southwestern corner

To the East

- UPRR tracks and the historic Suisun City downtown

To the West

- LedgeWood Creek

The following Solano County Assessor's Parcel Numbers make up the project site: 320-190-260; 320-190-020; 320-190-160; 320-010-39; 320-020-04; 320-020-10; 320-020-14; 320-020-11; and 320-020-16. Parcels 320-020-14, -16, and -11 are partially located in the Suisun City limits at the northeastern corner of the project site.

Current Project Site Description

The project site is designated Agricultural land by the Solano County General Plan; however, the Solano County Important Farmland Map (2000) indicates that the project site is not Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. The portion of the project site west of Pennsylvania Avenue consists primarily of level, grazed fields dominated by introduced grasslands. Within the grasslands, several seasonal wetlands exist, mostly man-made, ranging in size from less than a quarter acre to more than eighteen acres. A small remnant of Ledgewood Creek exists in the southern portion of the site that supports arroyo willows and Gooding's black willows (the only trees identified on the project site) and other riparian vegetation. The portion of the project site east of Pennsylvania Avenue is comprised mostly of wetlands. A drainage canal runs north to south through the western portion of the site. The canal flows directly to a slough, which feeds into Suisun Bay, and is subject to tidal fluctuation. The limited upland areas on the site consist mostly of annual grassland. A 5.3-acre parcel located immediately east of Pennsylvania Avenue is currently being used as a dumpsite for construction debris such as broken concrete and excavated soil. Structures do not currently exist on the project site.

Project Components

The proposed project involves annexation of the project site, general plan amendments, and rezoning. These entitlements are discussed in more detail below. Generally, the proposed project includes a retail site, high density residential sites, and an open space site.

Annexation

The proposed project consists of the annexation of 167.6 ± acres into the City limits of Suisun City. The total annexation acreage of 167.6 acres includes the 5.3-acre parcel noted above (APN 320-020-04), which is not owned by the applicant, and ±8 acres of right-of-way (including Pennsylvania Road, Cordelia Road, SR 12, and the UPRR), which are also not owned by the applicant. It should be noted that a portion of the 167.6 acres is already within the City limits of Suisun City (northeastern corner of the project site) and therefore does not require annexation.

General Plan Land Use Designations

Because the majority of the project site is within Solano County, the County has assigned land use designations to the project site. Solano County designates the site as General Industrial, except for a small portion of the site surrounding Pennsylvania Road and bordering SR 12 right-of-way, which is designated as Highway Commercial. In addition, because the majority of the project site is within the Suisun City SOI, land use designations have also been assigned to the project site by Suisun City. Suisun City designates the project site as Limited Industrial/Business Park, except for a small portion of the site surrounding Pennsylvania Road, which is designated General Commercial. However, the project requires amendments to the Suisun City General Plan land use designations. The

project involves the re-designation of the western portion of the site (west of Pennsylvania Road) from Limited Industrial/Business Park and General Commercial to Planned Unit Development (PUD) Commercial to accommodate future retail development. The project also involves the re-designation of the eastern portion of the project site (east of Pennsylvania Road) from Limited Industrial/Business Park and General Commercial to Agriculture-Open Space to accommodate open space uses as well as 4 acres to be re-designated Residential High Density. In addition, the southwestern portion of the project site would be re-designated from Limited Industrial/Business Park to Residential High Density.

Furthermore, the northeastern corner of the site, which is currently located within the Suisun city limits, is also proposed to be retained as open space and therefore would need to be re-designated from Residential Low Density to Agriculture-Open Space.

Prezoning

The proposed project is divided into four (4) Planning Areas (PA). The approximate acreages of the Planning Areas are shown below in Table 1. Because the majority of the project site is proposed for annexation to Suisun City, prezoning would be required as part of the project entitlements. The proposed prezoning for the project site is also illustrated below in Table 1.

In terms of the land use types proposed for each Planning Area, Planning Area 1 would be a retail site and Planning Areas 2 and 3 would be high density residential sites. In addition, Planning Area 4 would be an open space site and therefore development is proposed to only occur east of Pennsylvania Road.

Table 1 Planning Area Acreage and Prezoning		
<i>Planning Area</i>	<i>Acreage</i>	<i>Prezoning</i>
1	± 69.5	General Commercial (CG) with Planned Unit Development (PUD) Overlay
2	± 11.7	High Density Residential (R-H) with PUD Overlay
3	± 4.0	High Density Residential (R-H) with PUD Overlay
4	± 74.4	Agriculture (AG)
Right-of-way	± 8	N/A
Total Site Acreage	167.6 ± acres	

As discussed above, the developable areas of the project site are comprised of Planning Areas 1, 2 and 3. The following table shows the floor-area ratio and corresponding maximum building square footage (SF) for Planning Area 1 and the maximum number of dwelling units allowed for Planning Areas 2 and 3.

Table 2			
Floor-Area Ratios of Planning Areas 1-3			
Planning Area	FAR	Site Area	Max Building SF¹
Planning Area 1	.30	± 69.5 acres	908,226 SF
Retail Total			908,226 SF
Planning Area	Max Density	Site Area	Max # of Dwelling Units
Planning Area 2	21 dwelling units/acre	± 11.7 acres	Approximately 246 units
Planning Area 3	21 dwelling units/acre	± 4.0 acres	84 units
Residential Total			330 units
Note: 1 acre = 43,560 square feet			
¹ Therefore, max building SF for each Planning Area = FAR x ----- acres x 43,560 SF			

The commercial and residential components of the project are proposed to be rezoned with a PUD overlay. The PUD will define specific permitted and conditional uses, as well as development standards such as setbacks, parking, landscaping, and architectural guidelines. The PUD will also outline the process for future review and approval of specific development proposals.

Project Areas Not Owned By Applicant

As noted previously, the project site includes a 5.3-acre parcel (APN 320-020-04), which is not owned by the project applicant. The parcel is located east of Pennsylvania Road, within Planning Area 4. The current Suisun City land use designations for this parcel are General Commercial and Limited Industrial/Business Park. Although the parcel is not owned by the project applicant, the assumption is made that the parcel would be annexed to the City if the project is approved in order to eliminate an island of unincorporated territory. Furthermore, the assumption is made that the parcel would be retained as open space, consistent with Planning Area 4, and would therefore be re-designated to Ag-Open Space and rezoned to Agriculture (AG).

As noted above, in addition to the 5.3-acre parcel, approximately 8 acres of land is located within the project site boundaries that are not owned by the applicant, which are made up of Pennsylvania Road, SR 12, Cordelia Road, and UPRR right-of-way. The right-of-way acreage would be annexed to Suisun City as part of the proposed project.

Infrastructure

The water, wastewater, drainage, and other utility infrastructure necessary to serve the project will be required both on- and off-site.

Project Entitlements

The entitlements requested with this application include:

- Annexation of approximately 167.6 ± acres to the City of Suisun City;
- General Plan Amendments of the project site to re-designate the western portion of the site (west of Pennsylvania Road) from Limited Industrial/Business Park to Planned Unit Development (PUD) General Commercial, the eastern portion of the project site (east of Pennsylvania Road) from Limited industrial/Business Park and General Commercial to Agriculture-Open Space and Residential High Density, and the northeastern corner of the site, which is currently located within the Suisun City limits, from Residential Low Density to Agriculture-Open Space;
- Rezoning of a total of 159.6 acres as follows: 69.5 acres of General Commercial (CG) with PUD Overlay; 15.7 acres of High Density Residential (R-H) with PUD Overlay; and 74.4 acres of Agriculture (AG).

ENVIRONMENTAL EFFECTS

The environmental analysis within the EIR is proposed to focus on the following technical environmental issues:

Aesthetics

The Aesthetics analysis will summarize existing regional and project area aesthetics and visual setting. The analysis will describe project specific aesthetics issues regarding development of the proposed project such as scenic vistas, trees, historic buildings, scenic highways, existing visual character or quality of the site and its surrounding areas, as well as light and glare. This analysis will also include a description of the existing setting, identification of the thresholds of significance, identification of impacts, and the development of mitigation measures and monitoring strategies.

Air Quality

The Air Quality analysis will summarize the existing climate and meteorology and current efforts to attain and maintain the State and federal air quality standards. The analysis will also document any existing sources of air pollution and identify sensitive receptors for air pollutants in the study area in addition to discussing the potential effects associated with changes in air quality, exposure of sensitive receptors to substantial pollutant concentrations, cumulative emissions and long term effects, as well as the short-term construction impacts.

The air quality analysis will include an evaluation of the existing setting, thresholds of significance, identification of impacts, and the development of mitigation measures and monitoring strategies. The chapter will be based on a technical study prepared for the project.

Biological Resources

The Biological Resources analysis will summarize the setting and describe the potential effects to plants, wildlife, and wetlands including adverse effects on rare, endangered, candidate, sensitive, and special status species for the project site. This analysis will include an evaluation of the existing setting, identification of the thresholds of significance, identification of impacts, and the development of mitigation measures and monitoring strategies for each project. The appropriate agencies such as Department of Fish and Game and the U.S. Army Corps of Engineers will be consulted. In addition, the analysis will identify the necessary permits related to biological resources. This analysis will be based on a technical report prepared for the project.

Hydrology and Water Quality

The analysis will summarize setting information and identify potential impacts on irrigation drainage, storm water drainage, flooding, groundwater, seepage, and water quality. Consideration will include on-site as well as off-site infrastructure facilities. The analysis will also include an evaluation of existing setting, identification of the thresholds of significance, identification of impacts, and the development of mitigation measures and monitoring strategies.

Land Use and Agricultural Resources

The Land Use analysis will evaluate the consistency of the proposed project with Suisun City's adopted plans and policies. The EIR will review the City's General Plan and Land Use Diagram, the General Plan EIR, the Solano County LAFCO Annexation Standards, and any other appropriate documents to address consistency issues. The Land Use analysis will further assess the compatibility of the proposed project with the surrounding land uses, both existing and proposed.

The agricultural resources portion of the analysis will summarize the status of the existing agricultural resources of the site and in the areas surrounding Suisun City, using the current state model and data, including identification of any prime/unique farmland or farmland of Statewide Importance on the project site. Any conflicts with existing zoning for agricultural use, Williamson Act, or right to farm ordinances applicable to the project site will also be identified. The analysis will further include a discussion regarding conversion of farmland to non-agricultural uses. Following the setting discussion, the chapter will identify thresholds of significance applicable to the proposed project including the loss of prime farmland. The impacts will be measured against the thresholds of significance and appropriate mitigation measures and monitoring strategies will be identified which are consistent with the policies of Suisun City and Solano County.

Noise

The Noise analysis will summarize regional and local noise setting information, identify relevant regulatory setting information, identify changes in ambient noise characteristics and the effects on sensitive receptors and potential effect of existing noise source generators. The Noise analysis will include an evaluation of the existing setting, identification of thresholds of significance, identification of impacts, and the development of

mitigation measures and monitoring strategies. The Noise analysis will be based upon a report being prepared for the project site.

Public Services and Utilities

The Public Services and Utilities analysis will summarize setting information and identify potential new demand for services on water supply, sewage systems, solid waste disposal, roads, law enforcement, fire protection, schools, libraries, parks and recreation, electric power, natural gas, and telephone. The EIR will analyze public services and utilities by consulting the appropriate City departments and other agencies. The EIR will analyze a drainage report, wastewater report, and water report that will be adequate to address the conveyance and capacity of each infrastructure component. The analysis will include an evaluation of the existing setting, identification of the thresholds of significance, identification of impacts, and the development of mitigation measures and monitoring strategies.

Transportation and Circulation

The Traffic and Circulation analysis will be based on a traffic study prepared for the project. The traffic study will describe existing traffic conditions, existing plus project traffic conditions, and cumulative traffic conditions. The report will also include standards of significance and methods of analysis, and will describe the impacts associated with traffic and will propose mitigation to reduce the level of impacts. The traffic analysis will summarize the existing and planned regional and local transportation network as well as existing and future traffic conditions. The analysis will identify traffic loads and capacity of street systems including level of service standards for critical street segments and intersections. Potential traffic effects associated with increases in volumes and changes in the nature of traffic and circulation patterns will be discussed as well as traffic hazards due to design features. Emergency access, transit and bicycle facilities also will be discussed.

Cumulative Impacts

In accordance with Section 15130 of the CEQA Guidelines, an analysis of the cumulative impacts will be undertaken and discussed in the EIR. In addition, pursuant to CEQA Section 21100(B)(5), the EIR will also address the potential for growth inducing impacts of the proposed project focusing on whether there will be a removal of any impediments to growth associated with the proposed project.

DISCUSSION OF ALTERNATIVES

In accordance with Section 15126.6(a) of the CEQA Guidelines, several project alternatives, including the No Project Alternative, will be analyzed. The alternatives analysis would "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." The analysis would include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. The significant effects of the alternatives are

discussed, but in less detail than the significant effects of the proposed project. The discussion will also identify and analyze the “environmentally superior alternative.”

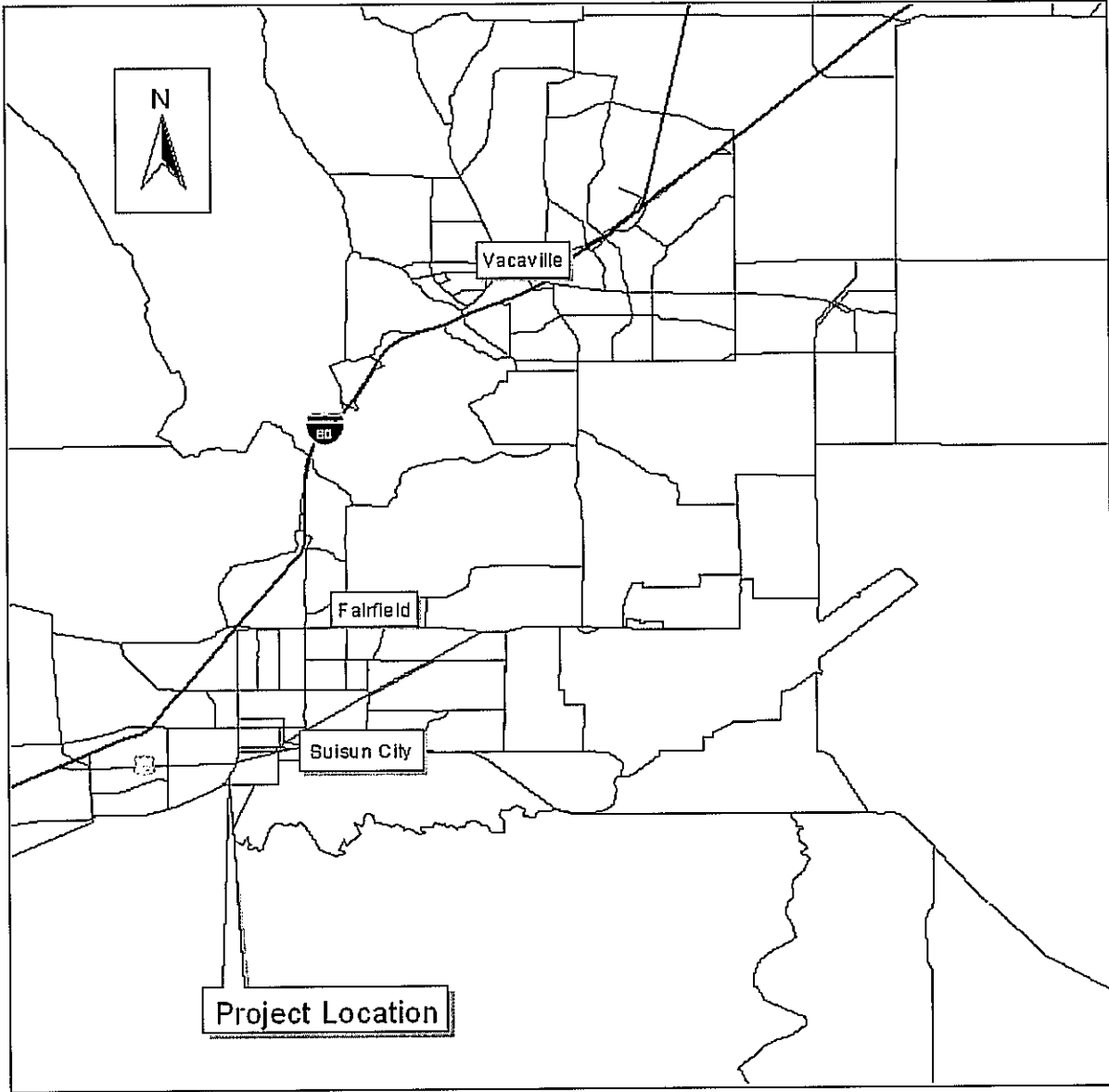
SUBMITTING COMMENTS

To ensure that the full range of issues related to this proposed project are addressed and all significant issues are identified, written comments are invited from all interested parties. Written comments concerning the proposed EIR for the Suisun City Marketplace Project should be directed to the name and address below:

**Gerry Raycraft, Community Development Director
City of Suisun City
701 Civic Center Blvd.
Suisun City, CA 94585
(707) 421-7335
(707) 429-3758
E-mail: graycraft@suisun.com**

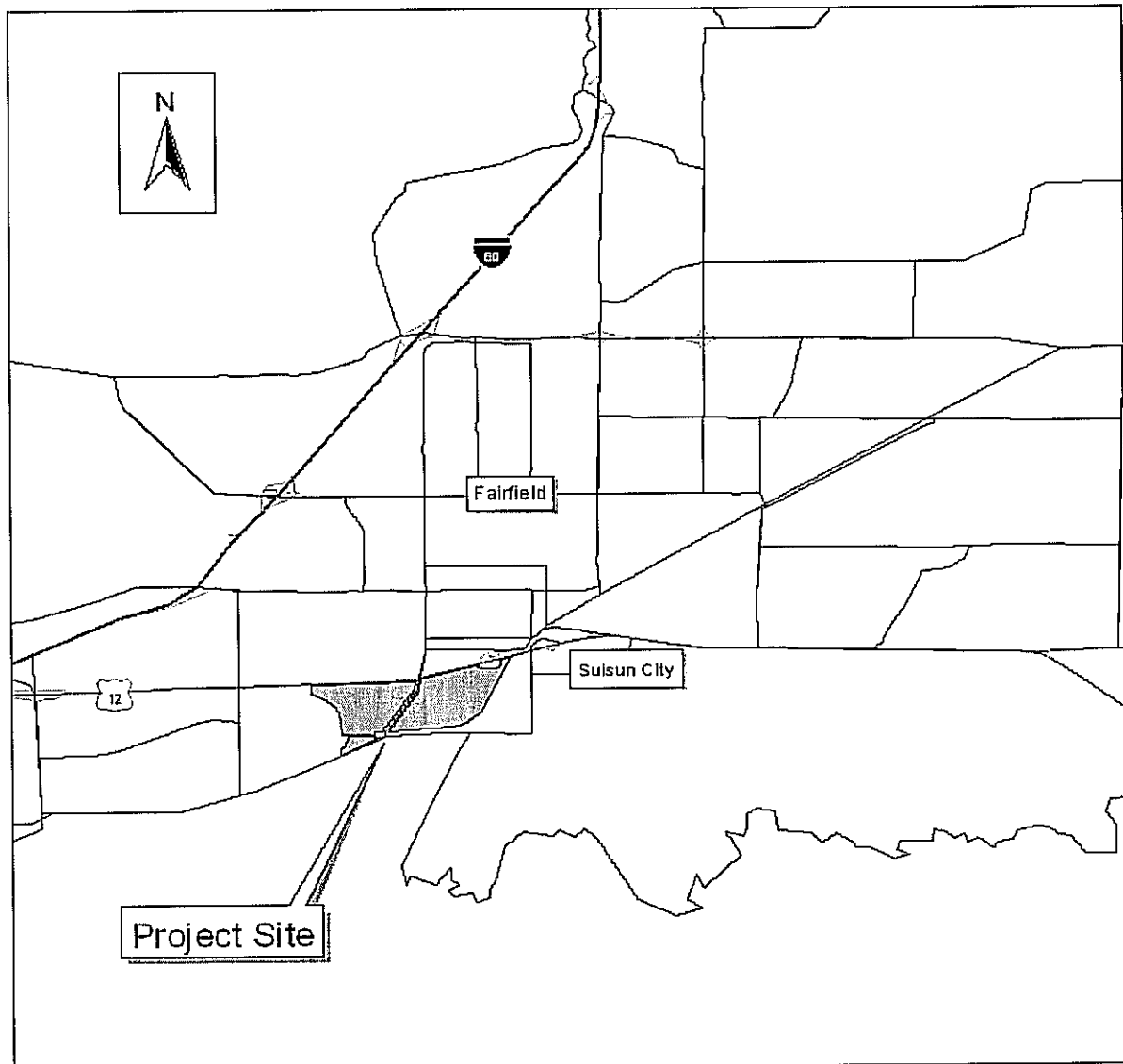
Written comments are due to the City of Suisun City at the location addressed above by 5:00 p.m. on October 18, 2004.

**Figure 1
Regional Location Map**



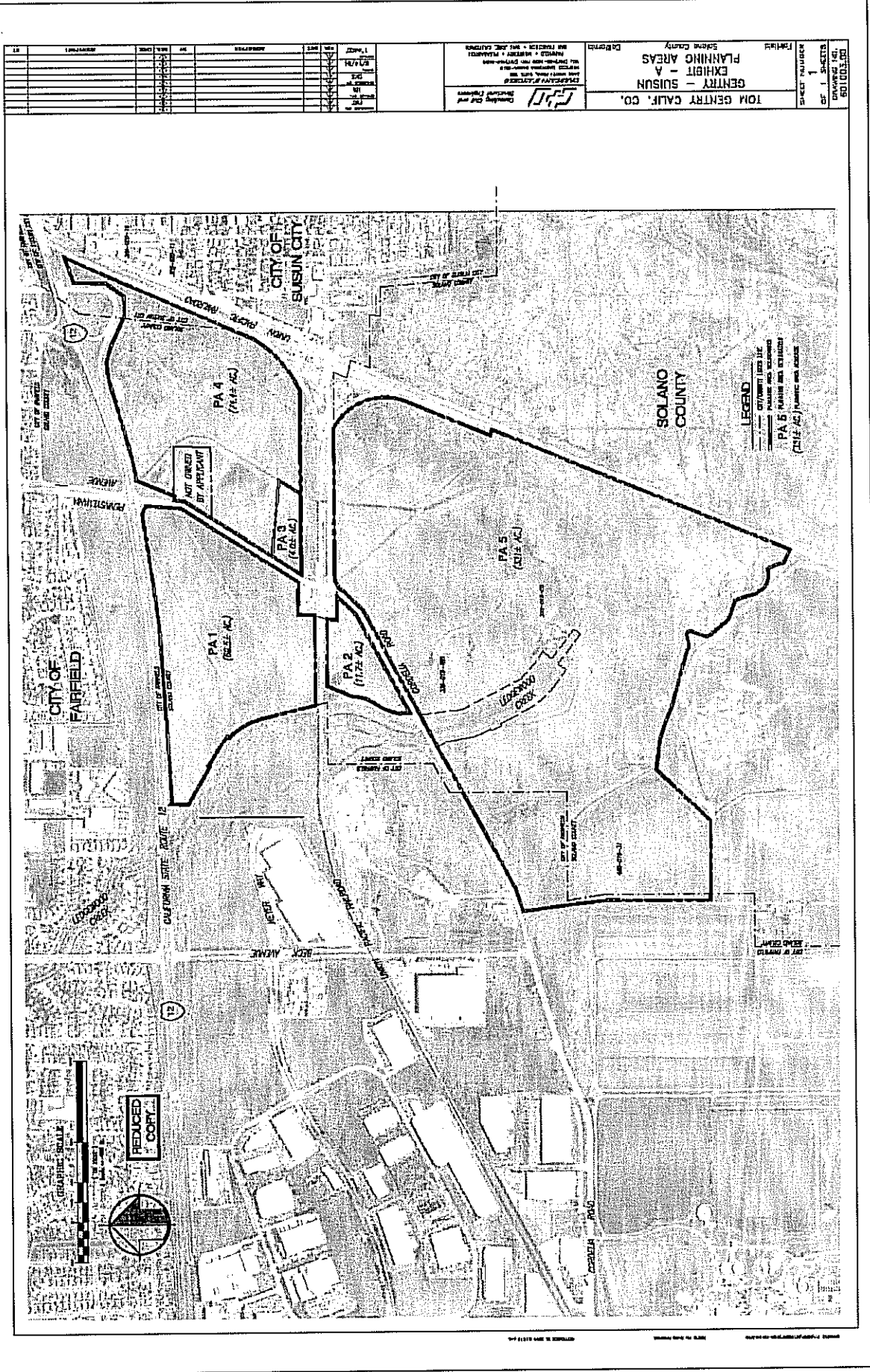
Raney Planning & Management
September 2004

Figure 2
Project Location Map



Raney Planning & Management
September 2004

Figure 3
Gentry Annexation Project Site Plan



TOM GENTRY CALIF. CO.		GENTRY - SUISUN		EXHIBIT - A		PLANNING AREAS		Solano County		Drawing Date and Scale		DATE: 10/15/10		DRAWN BY: J. SMITH		SHEET NUMBER: 1		OF 1 SHEETS		PROJECT NUMBER	
PROJECT NUMBER		DATE		SCALE		SHEET NUMBER		OF 1 SHEETS		DRAWN BY		CHECKED BY		DATE		SCALE		SHEET NUMBER		OF 1 SHEETS	
PROJECT NUMBER		DATE		SCALE		SHEET NUMBER		OF 1 SHEETS		DRAWN BY		CHECKED BY		DATE		SCALE		SHEET NUMBER		OF 1 SHEETS	

DATE: February 24, 2005

TO: Responsible Agencies, Trustee Agencies, and Interested Persons

FROM: Gerry Raycraft, Community Development Director
City of Suisun City

**SUBJECT: NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT
FOR THE PROPOSED GENTRY PROPERTY ANNEXATION**

The City of Suisun City, Community Development Department is the Lead Agency for the preparation of an Environmental Impact Report (EIR) for the proposed annexation of approximately 172.5 acres of land and an approximately 88.4-acre mixed use development within the area to be annexed (together, the "project"). Suisun City ("City") has directed the preparation of this EIR in compliance with the California Environmental Quality Act (CEQA). The project EIR is also being prepared to satisfy the annexation report requirement within Sections 17.52.010- .050 of the Municipal Code of the City of Suisun City relating to Annexations.

Once a decision is made to prepare an EIR, the Lead Agency must prepare a Notice of Preparation ("NOP") to inform all Responsible and Trustee agencies that an EIR will be prepared (CEQA Guidelines Section 15082). The purpose of the NOP is to provide agencies with sufficient information describing both the proposed project and the potential environmental effects to enable the agencies to make a meaningful response as to the scope and content of the information to be included in the EIR. Suisun City is also soliciting comments on the scope of the EIR from interested persons.

Although the City issued an earlier NOP for the annexation component of the project on September 16, 2004, and held a scoping meeting on September 28, 2004, the project has since been changed to include the 88.4-acre mixed use development within the area to be annexed. While the EIR for the original annexation project would have been a program-level EIR, the EIR for the revised project will now be a project-level EIR. In light of the changes in the scope of the project and the EIR, the City is now issuing an updated NOP, and holding a scoping meeting in order to receive comments on the updated NOP.

SCOPING MEETING

A public scoping meeting will be held regarding the proposed EIR for the Gentry Property Annexation on March 22, 2005 commencing at 6:00 PM at the Suisun City Council Chambers located at 701 Civic Center Boulevard, Suisun City, CA 94585.

PROJECT DESCRIPTION

Project Location

The project area consists of approximately 498.482 acres, with 172.358 acres currently within the jurisdiction of Solano County and planned to be annexed to the City of Suisun City as part of the project, 5.124 acres already located within the Suisun City limits and 321 acres to remain in Solano County outside of the Suisun City limits. Located nearly 45 miles northeast of San Francisco and 45 miles southwest of the City of Sacramento, Solano County is bordered by Napa, Yolo, San Joaquin, and Contra Costa Counties and covers 823 square miles, about half of which lies in the Sacramento Valley. The project site is located within the Suisun City Sphere of Influence (SOI).

A small California community of 27,000 residents, Suisun City is situated in central Solano County. The City is located on the Suisun Channel, which connects with Suisun and Grizzly Bays and links the City with the Sacramento River and the San Francisco Bay. Although the northeast corner of the project site crosses into the Suisun City limits, the majority of the project area is located west of the Suisun City limits in the northwest corner of a junction in the Union Pacific Railroad (UPRR) tracks. Pennsylvania Avenue, south of State Route (SR) 12, diagonally transects the approximate center of the project area in a northeast/southwest direction. (See Figures 1 and 2.)

The surrounding areas of the project site are as follows:

To the North

- State Route 12

To the Northwest

- Fairfield City limits

To the South

- UPRR tracks
- Pennsylvania Avenue intersects with Cordelia Road
- Cordelia Road (runs parallel to UPRR tracks)

To the Southwest

- UPRR tracks
- Cordelia Road at the southwestern corner

To the East

- UPRR tracks and the historic Suisun City downtown

To the West

- Ledgewood Creek

Table 1, following, lists the Assessor's Parcels that comprise the project site. The leftmost column of Table 1 provides the Planning Area ("PA") in which each Assessor's Parcel is

located, if any; the Planning Areas are discussed in detail under "Project Components," below. See Figure 3 for a visual representation of the Planning Areas.

Table 1 Assessor's Parcels Comprising the Project Site			
PA #	Assessors Parcel Number	Owner	Gross Acreage
PA 1	0032-010-390 (part) ¹	Gentry	71.338
PA 2	0032-190-260	Gentry	12.713
	0032-190-160	Sheldon Oil ²	0.393
PA 3	0032-020-100 (part)	Gentry	4.000
PA 4 (part)	0032-020-100 (part)	Gentry	48.443
	0032-020-140 (part)	Gentry	20.808
	0032-020-160 (part)	Gentry	0.233
N/A	0032-020-040	GF Gilbert	5.000
N/A	0032-190-020	R&CS Ardave	0.579
N/A	SPRR Right of Way	N/A	2.661
N/A	Cordelia Road Right of Way	N/A	4.082
N/A	Pennsylvania Avenue Right of Way	N/A	2.108
Subtotal – Area To Be Annexed Into Suisun City			172.358
PA 4 (part)	0032-020-110	Gentry	0.532
	0032-020-140 (part)	Gentry	2.932
	0032-020-160 (part)	Gentry	1.660
Subtotal – Area Already Located In Suisun City			5.124
PA 5	Various	Gentry	321.000
Subtotal – Area To Remain Outside Of Suisun City			321.000
TOTAL GROSS ACREAGE WITHIN PROJECT SITE:			498.482

¹ Note that two portions of this parcel are not part of the project site: the portion that comprises the west side of Pennsylvania Avenue to the north of Highway 12 (0.452 acres) and the portion that comprises the west side of Pennsylvania Avenue immediately north of the railroad right of way (0.129 acres).

² This parcel is under contract to be sold to Gentry.

Current Project Site Description

The project site is designated Agricultural land by the Solano County General Plan; however, the Solano County Important Farmland Map (2000) indicates that the project site is not Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. The portion of the project site west of Pennsylvania Avenue consists primarily of level, grazed fields dominated by introduced grasslands. Within the grasslands, several seasonal wetlands exist, mostly man-made, ranging in size from less than a quarter acre to more than eighteen acres. A small remnant of Ledgewood Creek exists in the southern portion of the site that supports arroyo willows and Gooding's black willows (the only trees identified on the project site) and other riparian vegetation. The portion of the project site east of Pennsylvania Avenue is comprised mostly of wetlands, and a drainage canal runs north to south through the western portion of the site. The canal flows directly to a slough, which feeds into Suisun Bay, and is subject to tidal fluctuation. The limited upland areas on the site consist mostly of annual grassland. A 5.3-acre parcel located immediately east of Pennsylvania Avenue has been used as a dumpsite for construction debris such as broken concrete and excavated soil and other waste. Structures do not currently exist on the project site.

Project Components

The proposed project involves two main components, the "Annexation" component and the "Mixed Use Development" component, as described below:

Annexation

The annexation component consists of the annexation of approximately 172.358 gross acres of land (the "Annexation Property")³ from Solano County into the City of Suisun City.

³ Approximately 157.535 gross acres of the Annexation Property are currently owned by Gentry and approximately 14.823 gross acres are currently public land or owned by other parties.

The Annexation Property, which is shown on Figure 4, attached hereto, consists of the following properties:

Table 2 Annexation Property	
Description	Gross Acreage
A site on which a mixed-project would be developed (see below). Referred to herein as the "Mixed Use Site."	88.444
The parcels that comprise Planning Area 4 (as shown on Table 1, above), to the extent that they are not already located within the boundaries of the City of Suisun City.	69.484
The parcel owned by R& CS Ardave (APN 0032-190-020). Referred to herein as the "Ardave Parcel."	0.579
The parcel owned by GF Gilbert (APN 0032-020-040). Referred to herein as the "Gilbert Parcel."	5.000
Various rights of way including portions of Pennsylvania Avenue, Cordelia Road, State Route 12 and UPRR track. Collectively referred to herein as the "Rights of Way."	8.851
TOTAL:	172.358

Mixed-Use Development

The Mixed-Use Development component consists of the subdivision and development of a mixed-use project on the approximately 88.444-acre Mixed Use Site. The Mixed Use Site is comprised of Planning Area 1, Planning Area 2 and Planning Area 3 (as shown on Table 1, above), as depicted on the Mixed Use Site Plan attached hereto as Figure 5⁴. Wetlands mitigation areas will be created on Planning Areas 4 and 5 for impacts of the Mixed-Use Development component of the project, but those Planning Areas are not a part of the Mixed Use Site, nor is the Gilbert Parcel.

Planning Area 1 (approximately 71.338 gross acres) encompasses the northern portion of the Mixed Use Site and is intended primarily for the development of a major retail center to meet the retail and commercial needs of residents of Suisun City and the region. Planning Area 1 would have a mix of retail tenants, which may include small shops, general merchandise stores, "big box" establishments such as a supercenter⁵ and/or a home improvement center, and service providers.

⁴ The configuration of improvements shown in Exhibit 5 is for illustrative purposes only. The exact site plan may change during the course of the land use process.

⁵ As used in this project description, the term "supercenter" is intended to refer to a retail tenant with a building size of approximately 200,000 square feet that will include grocery, general merchandise, and a garden center. A supercenter would presumably operate 7 days a week and up to 24 hours a day. The assumption that the tenant may be a supercenter is intended to ensure that the City analyzes certain impacts which may be unique, such as traffic impacts and the potential for "urban decay."

Planning Area 2 (approximately 13.106 gross acres) encompasses the southern portion of the Mixed Use Site, and is intended for the development of medium- to high-density residential uses such as small lot single-family detached townhomes and condominiums. Current development plans for this Planning Area include two- and three-story single family attached and/or detached for sale housing. Designed around pedestrian walkways weaving through village-type housing connected to pocket parks, the project is oriented towards first time buyers. Planning Area 2 includes the 0.393 acre parcel owned by Sheldon Oil, referred to herein as the "Sheldon Oil Parcel."

Planning Area 3 (approximately 4.00 gross acres) is located just northeast of the intersection of Pennsylvania Avenue and the existing Union Pacific Railroad (UPRR) tracks, and is intended for the development of medium- to high-density residential uses such as small lot single-family detached townhomes and condominiums. Current plans for this area are similar to those for Planning Area 2.

Required Project Entitlements

The entitlements requested in connection with this project include:

Annexation of Mixed Use Site, Rights of Way, Ardave Parcel and Gilbert Parcel

Approximately 172.358 gross acres of land would be annexed by Suisun City, pursuant to Division II of Title 17 of the City Code. The area to be annexed includes approximately 14.823 gross acres of land that is not owned by the applicant: the Sheldon Oil Parcel (part of the Mixed Use Site); the Rights of Way; the Ardave Parcel; and the Gilbert Parcel. The annexation must be approved by both the City and the Solano County Local Agency Formation Commission.

Tentative Subdivision Map for Planning Area 1

Planning Area 1 would be subdivided to create 20 parcels in total. A tentative map would first be prepared for Planning Area 1, and then one or more final maps would be filed to subdivide the property.

General Plan Amendment to Designate the Ardave Parcel, Gilbert Parcel, and Planning Area 4

The land use map in the City's General Plan would be amended to accommodate the project, pursuant to City Code Chapter 17.56. Because all portions of the Ardave Parcel, Gilbert Parcel and Planning Area 4 are located either within Suisun City or the Suisun City Sphere of Influence, General Plan land use designations already have been assigned to all of the applicable property by Suisun City.⁶ Suisun City currently designates all of that property as Limited Industrial / Business Park, except for an area bordering Pennsylvania Avenue at the northern end of the site (including a portion of the Gilbert Parcel), which is

⁶ As noted under "Current Project Site Description," above, because the Annexation Property is currently within Solano County, the County has assigned the "Intensive Agricultural" land use designation to the Gilbert Parcel and the portion of Planning Area 4 that is not already within the boundaries of the City of Suisun City, and has assigned the "Extensive Agricultural" land use designation to the Ardave Parcel.

designated General Commercial (see Figure 6). The Suisun City General Plan is therefore proposed to be amended as follows (also see Figure 7):⁷

The portion of the Gilbert Parcel that is designated Limited Industrial / Business Park would be redesignated to General Commercial, resulting in the redesignation of the entire parcel to General Commercial.

Planning Area 4 would be redesignated from Limited Industrial / Business Park and General Commercial to Agriculture / Open Space.

Table 3, below, shows the maximum density permitted for the Ardave Parcel, Gilbert Parcel and Planning Area 4, pursuant to the General Plan (as amended):

Table 3 Maximum Density of Ardave Parcel, Gilbert Parcel and Planning Area 4 After General Plan Redesignation			
Parcel(s)	Density	Site Area (gross acres)	Max. Development
Ardave Parcel	0.6 FAR	± 0.6	15,682 sf of Limited Industrial / Bus. Park
Gilbert Parcel	0.30 FAR	± 5.0	65,340 sf of Retail
Planning Area 4	N/A	± 74.6	N/A
Totals		± 80.2	65,340 sf of Retail plus 15,682 sf of Limited Industrial / Bus. Park

General Plan Land Use Designations for Mixed Use Site

The land use map in the City's General Plan would be amended to accommodate the Mixed Use Development component of the project, pursuant to City Code Chapter 17.56. Because all portions of the Mixed Use Site are located within the Suisun City Sphere of Influence, General Plan land use designations have been assigned to all of the Mixed Use Site by Suisun City.⁸ Suisun City designates all of the Mixed Use Site as Limited Industrial / Business Park, except for an area bordering Pennsylvania Avenue at the northern end of the site, which is designated General Commercial (see Figure 6). The Suisun City General Plan is therefore proposed to be amended as follows (see Figure 7):

- Planning Area 1 of the Mixed Use Site would be redesignated from Limited Industrial / Business Park and General Commercial to General Commercial.

⁷ Note that the Ardave Parcel would remain designated Limited Industrial / Business Park.

⁸ As noted under "Current Project Site Description," above, because the Annexation Property is currently within Solano County, the County has assigned the Mixed Use Site the following land use designations: Intensive Agricultural (for the portion to the north of the UPRR tracks) and Extensive Agricultural (for the portion to the south of the UPRR tracks).

- Planning Area 2 of the Mixed Use Site would be redesignated from Limited Industrial / Business Park to Residential High Density.
- Planning Area 3 of the Mixed Use Site would be redesignated from Limited Industrial / Business Park to Residential High Density.

Table 4, below, shows the maximum density permitted for the Mixed Use Site, pursuant to the General Plan (as amended):

Planning Area	Density	Site Area (gross acres)	Max. Development
Planning Area 1	0.30 FAR	± 71.3	931,748 sf of Retail
Planning Area 2	21 dwelling units/acre	± 13.1	Approx. 275 dwelling units
Planning Area 3	21 dwelling units/acre	± 4.0	Approx. 84 dwelling units
Totals		± 88.4	931,748 sf of Retail plus 359 dwelling units

Rezoning and Prezoning of Ardave Parcel, Gilbert Parcel and Planning Area 4

The Ardave Parcel, Gilbert Parcel and Planning Area 4 would be rezoned or prezoned (as applicable) to the designations listed below in Table 5 (see also Figure 8, attached hereto), pursuant to City Code Chapter 18.74:

Parcel(s)	Site Area (acres)	Prezoning
Ardave Parcel	± 0.6	M-L (Light Manufacturing)
Gilbert Parcel	± 5.0	CG (General Commercial)
Planning Area 4	± 74.6	A (Agriculture)
Total	± 80.2	

Prezoning of Mixed Use Site

The Mixed Use Site would be prezoned to the designations listed below in Table 6 (see also Figure 8, attached hereto), pursuant to City Code Chapter 18.74:

Table 6 Planning Area Acreage and Rezoning for Mixed Use Site		
Planning Area	Site Area (acres)	Rezoning
1	± 71.3	General Commercial (CG) with Planned Unit Development (PUD) Overlay
2	± 13.1	High Density Residential (R-H) with PUD Overlay
3	± 4.0	High Density Residential (R-H) with PUD Overlay
Total	± 88.4	

As shown in Table 6, above, Planning Areas 1, 2 and 3 would be rezoned with a Planned Unit Development (PUD) overlay, including the approval of a Preliminary Development Plan (PDP) for the PUD, prepared pursuant to City Code Chapter 18.63. The PDP would define the scope of specific permitted and conditional uses, as well as development standards such as setbacks, parking, landscaping and architectural guidelines, for the Mixed Use Site. The PDP (in conjunction with the Development Agreement, discussed below) would also outline the process for future review and approval of specific development proposals for the Mixed Use Site. One or more Precise Development Plans would also be approved as part of the project.

Development Agreement

It is presently contemplated that a Development Agreement regarding the Mixed Use Development component of the project would be entered into between the City of Suisun City and the applicant, pursuant to City Code Chapter 18.62.

Other Entitlements

Development for the Mixed Use Development component of the project would require additional entitlements, which may include but are not necessarily limited to the following:

- Signage approval pursuant to City Code Chapter 18.54
- Site plan and architectural review approval pursuant to City Code Chapter 18.68
- Conditional use permit(s) pursuant to City Code Chapter 18.66
- Additional subdivision actions pursuant to City Code Title 17
- Approvals from other governmental agencies, such as the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, Caltrans, the California Department of Fish and Game, and the Regional Water Quality Control Board

Infrastructure

The water, wastewater, drainage and other utility infrastructure necessary to serve the project would be required both on- and off-site.

On-site Wetlands

The project site contains approximately 332.38 acres of wetlands determined by the Corps of Engineers to be subject to their Section 404 Clean Water Act Jurisdiction. Five types of wetland habitats occur within the project site. These include Alkali Seasonal Marsh, Brackish Marsh, Seasonally Saturated Annual Grassland, Vernal Pool and Riparian wetland habitats. Approximately 36 acres of wetland habitat as depicted in Table 7, below, will be impacted by the proposed project. The total amount of habitat loss is less than 2 percent of the existing wetlands within the LedgeWood Creek watershed area which is located within the Cities of Suisun City and Fairfield and Solano County. The wetlands impacted serve the principal functions of flood flow alteration, sediment stabilization, sediment/toxicant retention, nutrient removal/ transformation, and wildlife habitat. Impacts will be off-set through habitat creation and preservation efforts primarily located within the unimpacted lands on Planning Area 4 (also known as the "Tooby Property") and Planning Area 5 (also known as the "Barnfield Property").

Wetland Habitat Type	Mixed Use Site (ac)	Planning Area 4 (ac)	Planning Area 5 (ac)	Total Habitat (ac)	Habitat Lost Before Mitigation (ac)
<i>Alkali Seasonal Marsh</i>	5.65	2.22	54.89	62.76	7.43
<i>Brackish Marsh</i>	0.00	53.44	108.46	161.90	0.00
<i>Seasonally Saturated Annual Grassland</i>	19.06	0.00	67.03	86.09	19.06
<i>Vernal Pool</i>	9.06	7.91	4.62	21.59	9.06
<i>Riparian</i>	0.04	0.00	0.00	0.04	0.04
Total Acreage Per Area	33.81	63.57	235.00	332.38	35.59

ENVIRONMENTAL EFFECTS

The environmental analysis within the EIR is proposed to focus on the following technical environmental issues:

Aesthetics

The Aesthetics analysis will summarize existing regional and project area aesthetics and visual setting. The analysis will describe project specific aesthetics issues regarding development of the proposed project such as scenic vistas, trees, historic buildings, scenic highways, existing visual character or quality of the site and its surrounding areas, as well as light and glare. This analysis will also include a description of the existing setting,

identification of the thresholds of significance, identification of impacts, and the development of mitigation measures and monitoring strategies.

Air Quality

The Air Quality analysis will summarize the existing climate and meteorology and current efforts to attain and maintain the State and federal air quality standards. The analysis will also document any existing sources of air pollution and identify sensitive receptors for air pollutants in the study area in addition to discussing the potential effects associated with changes in air quality, exposure of sensitive receptors to substantial pollutant concentrations, cumulative emissions and long term effects, as well as the short-term construction impacts.

The air quality analysis will include an evaluation of the existing setting, thresholds of significance, identification of impacts, and the development of mitigation measures and monitoring strategies. The chapter will be based on a technical study prepared for the project.

Biological Resources

The Biological Resources analysis will summarize the setting and describe the potential effects to plants, wildlife, and wetlands including adverse effects on rare, endangered, candidate, sensitive, and special status species for the project site. This analysis will include an evaluation of the existing setting, identification of the thresholds of significance, identification of impacts, and the development of mitigation measures and monitoring strategies for each project. The appropriate agencies such as Department of Fish and Game and the U.S. Army Corps of Engineers will be consulted. In addition, the analysis will identify the necessary permits related to biological resources. This analysis will be based on a technical report prepared for the project.

Hydrology and Water Quality

The analysis will summarize setting information and identify potential impacts on irrigation drainage, storm water drainage, flooding, groundwater, seepage, and water quality. Consideration will include on-site as well as off-site infrastructure facilities. The analysis will also include an evaluation of existing setting, identification of the thresholds of significance, identification of impacts, and the development of mitigation measures and monitoring strategies.

Land Use and Agricultural Resources

The Land Use analysis will evaluate the consistency of the proposed project with Suisun City's adopted plans and policies. The EIR will review the City's General Plan and Land Use Diagram, the General Plan EIR, the Solano County LAFCO Annexation Standards, and any other appropriate documents to address consistency issues. The Land Use analysis will further assess the compatibility of the proposed project with the surrounding land uses, both existing and proposed.

The agricultural resources portion of the analysis will summarize the status of the existing agricultural resources of the site and in the areas surrounding Suisun City, using the current state model and data, including identification of any prime/unique farmland or farmland of Statewide Importance on the project site. Any conflicts with existing zoning for

agricultural use, Williamson Act, or right to farm ordinances applicable to the project site will also be identified. The analysis will further include a discussion regarding conversion of farmland to non-agricultural uses. Following the setting discussion, the chapter will identify thresholds of significance applicable to the proposed project including the loss of prime farmland. The impacts will be measured against the thresholds of significance and appropriate mitigation measures and monitoring strategies will be identified which are consistent with the policies of Suisun City and Solano County.

Noise

The Noise analysis will summarize regional and local noise setting information, identify relevant regulatory setting information, identify changes in ambient noise characteristics and the effects on sensitive receptors and potential effect of existing noise source generators. The Noise analysis will include an evaluation of the existing setting, identification of thresholds of significance, identification of impacts, and the development of mitigation measures and monitoring strategies. The Noise analysis will be based upon a report being prepared for the project site.

Public Services and Utilities

The Public Services and Utilities analysis will summarize setting information and identify potential new demand for services on water supply, sewage systems, solid waste disposal, roads, law enforcement, fire protection, schools, libraries, parks and recreation, electric power, natural gas, and telephone. The EIR will analyze public services and utilities by consulting the appropriate City departments and other agencies. The EIR will analyze a drainage report, wastewater report, and water report that will be adequate to address the conveyance and capacity of each infrastructure component. The analysis will include an evaluation of the existing setting, identification of the thresholds of significance, identification of impacts, and the development of mitigation measures and monitoring strategies.

Socio-Economic

The EIR will include an analysis of potential social and economic effects of the project, and the potential for any urban decay which might result from those effects in accordance with the requirements of CEQA, including, without limitation, as interpreted by Bakersfield Citizens for Local Control v. City of Bakersfield (December 2004), 124 Cal.App.4th 1184.

Transportation and Circulation

The Traffic and Circulation analysis will be based on a traffic study prepared for the project. The traffic study will describe existing traffic conditions, existing plus project traffic conditions, and cumulative traffic conditions. The report will also include standards of significance and methods of analysis, and will describe the impacts associated with traffic and will propose mitigation to reduce the level of impacts. The traffic analysis will summarize the existing and planned regional and local transportation network as well as existing and future traffic conditions. The analysis will identify traffic loads and capacity of street systems including level of service standards for critical street segments and intersections. Potential traffic effects associated with increases in volumes and changes in the nature of traffic and circulation patterns will be discussed as well as traffic hazards due to design features. Emergency access, transit and bicycle facilities also will be discussed.

Cumulative Impacts

In accordance with Section 15130 of the CEQA Guidelines, an analysis of the cumulative impacts will be undertaken and discussed in the EIR. In addition, pursuant to CEQA Section 21100(B)(5), the EIR will also address the potential for growth inducing impacts of the proposed project focusing on whether there will be a removal of any impediments to growth associated with the proposed project.

DISCUSSION OF ALTERNATIVES

In accordance with Section 15126.6(a) of the CEQA Guidelines, several project alternatives, including the No Project Alternative, will be analyzed. The alternatives analysis would "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." The analysis would include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. The significant effects of the alternatives are discussed, but in less detail than the significant effects of the proposed project. The discussion will also identify and analyze the "environmentally superior alternative."

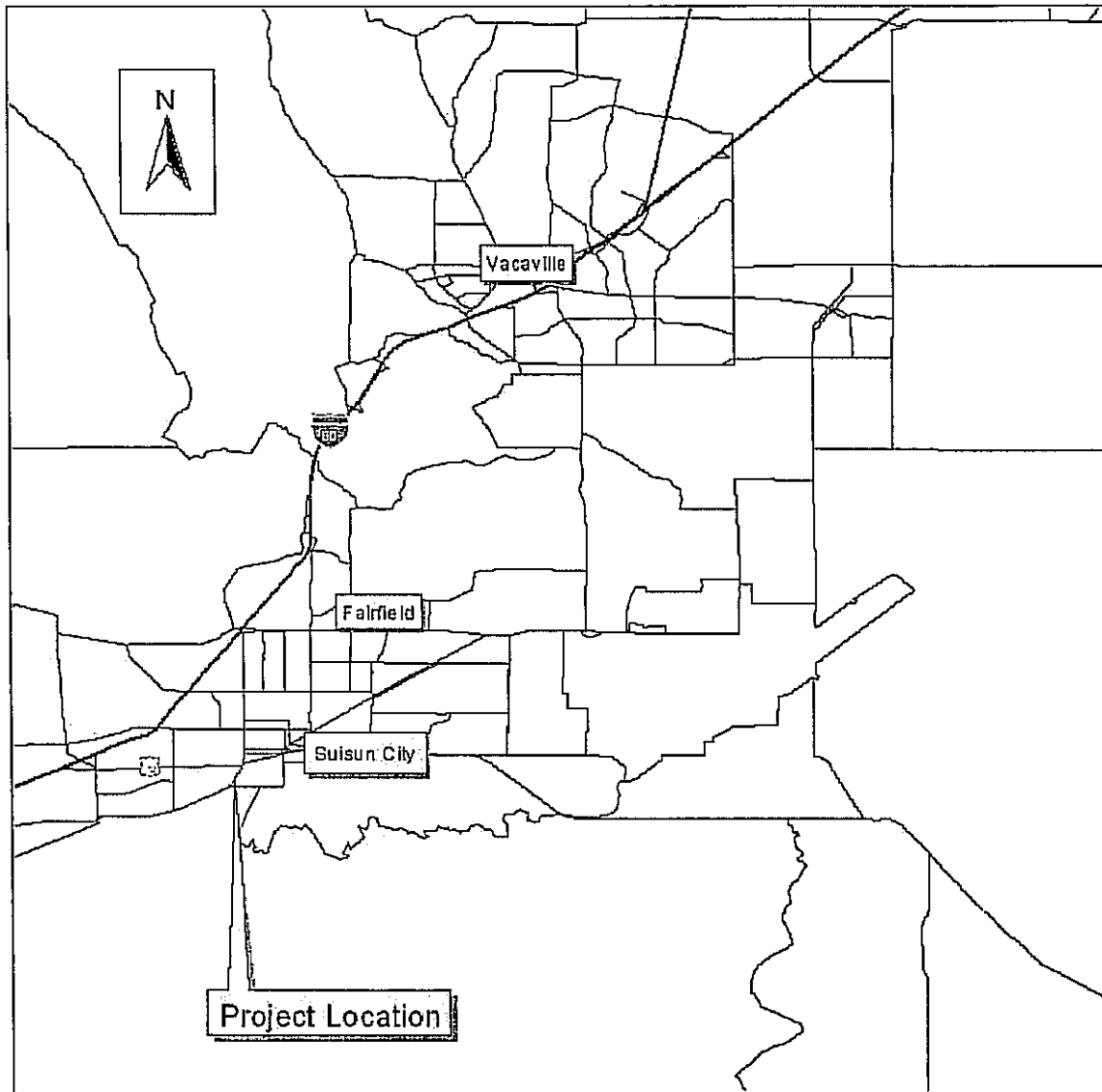
SUBMITTING COMMENTS

To ensure that the full range of issues related to this proposed project are addressed and all significant issues are identified, written comments are invited from all interested parties. Written comments concerning the proposed EIR for the Suisun City Marketplace Project should be directed to the name and address below:

**Gerry Raycraft, Community Development Director
City of Suisun City
701 Civic Center Blvd.
Suisun City, CA 94585
(707) 421-7335
(707) 429-3758
E-mail: graycraft@suisun.com**

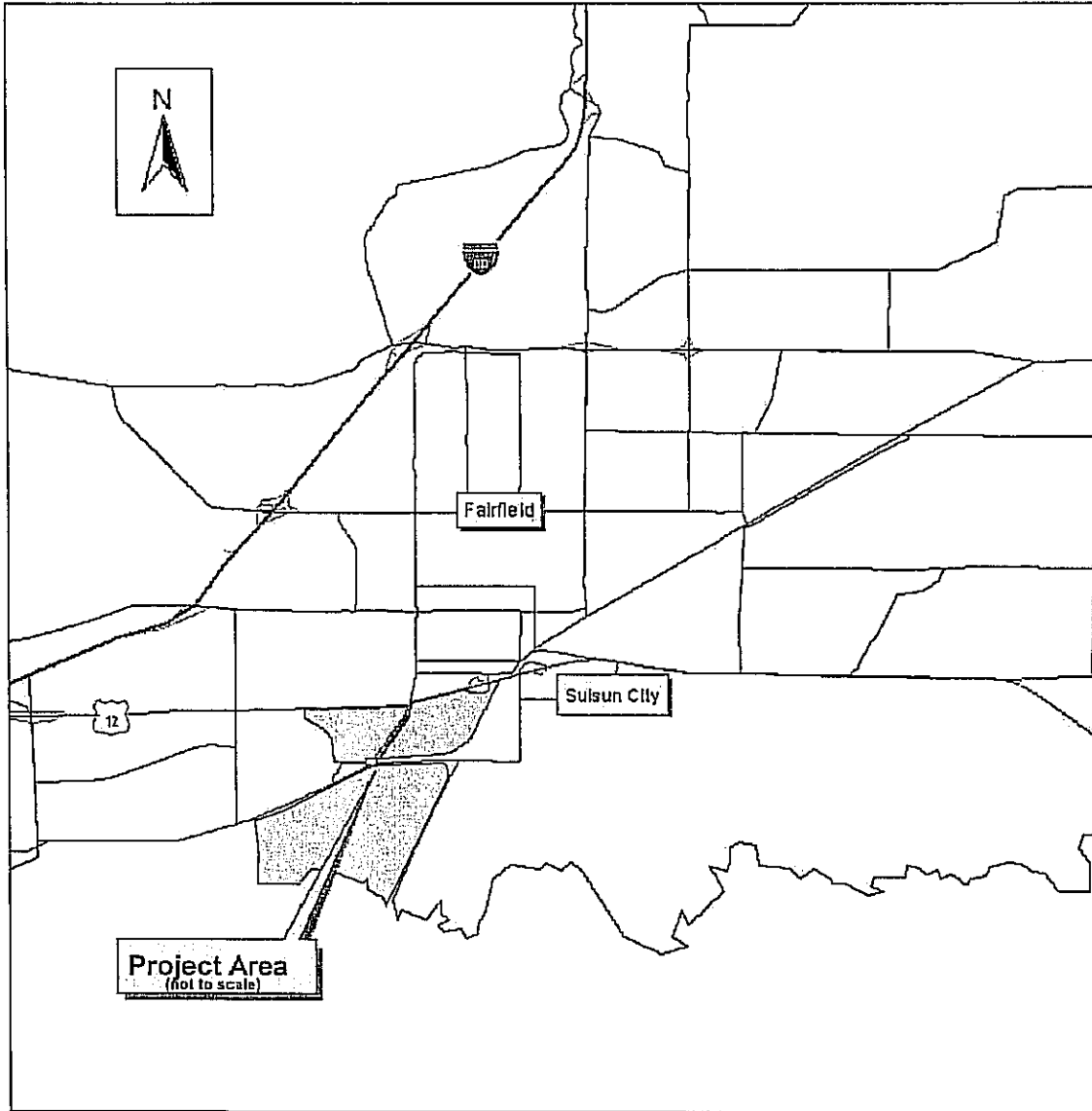
Written comments are due to the City of Suisun City at the location addressed above by 5:00 p.m. on April 10, 2005.

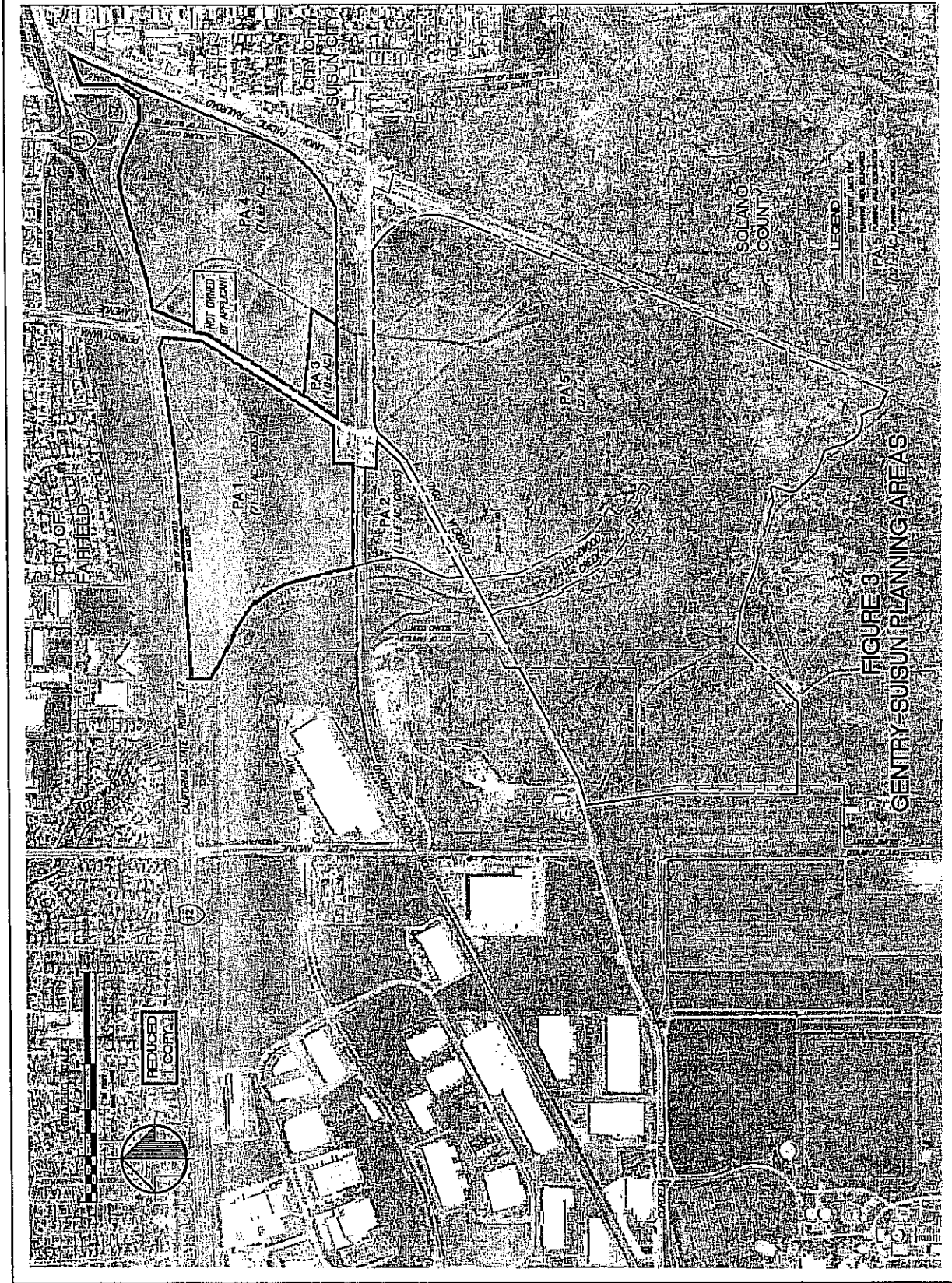
FIGURE 1
REGIONAL LOCATION MAP



Raney Planning & Management
September 2004

**FIGURE 2
PROJECT AREA LOCATION**





Creating Of and
 Gentry
 2400 North Main Street
 Suisun, CA 94588-1010
 707-431-7500
 FAX 707-431-7501
 GENTRY OF CALIFORNIA COMPANY
 1400 W. 14TH ST. SUITE 200
 OAKLAND, CA 94612
 415-779-8800

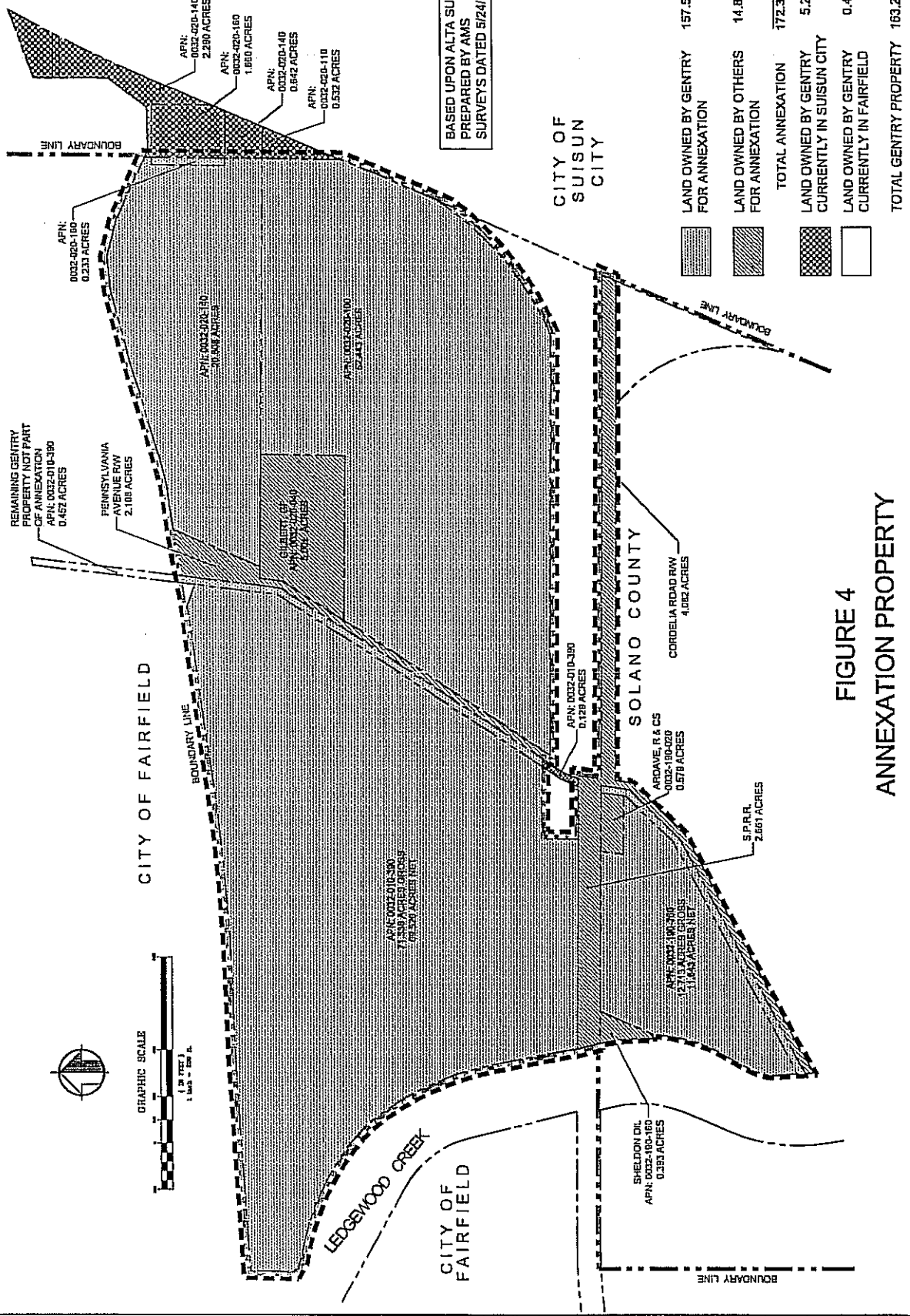
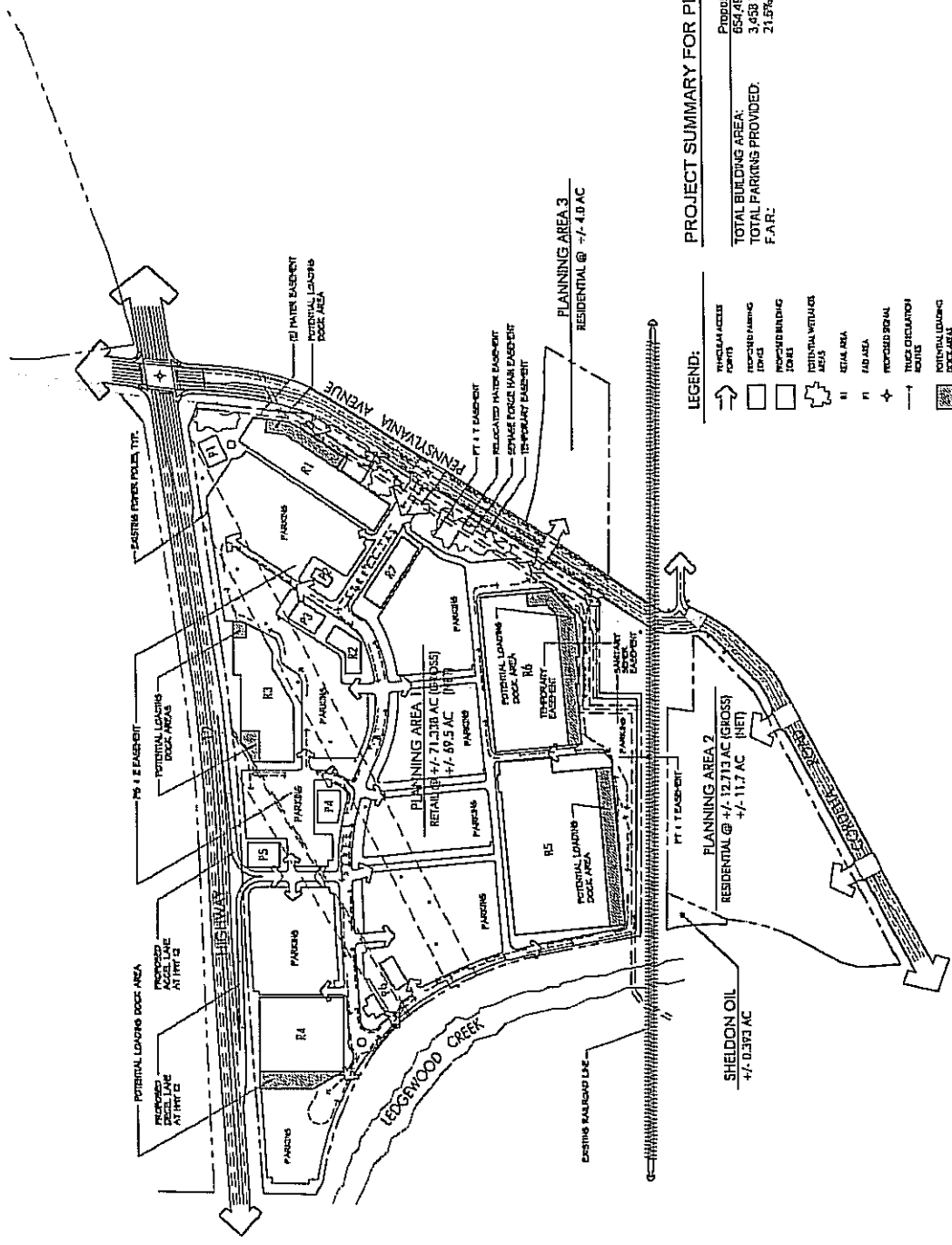


FIGURE 4
ANNEXATION PROPERTY



PROJECT SUMMARY FOR PLANNING AREA 1

Proposed Numbers:	
TOTAL BUILDING AREA:	654,489 SF
TOTAL PARKING PROVIDED:	3,458 Spaces (5.7 SP/1000 SF)
F.A.R.:	21.8%

LEGEND:

- TRUCKING ACCESS
- PARKING
- EXISTING PARKING
- PROPOSED PARKING
- PROPOSED ZONING
- POTENTIAL UTILITIES AREAS
- RETAIL AREA
- FAB AREA
- PROPOSED SIGNAL
- TRUCK CIRCULATION ROUTES
- POTENTIAL LOADING DOCK AREAS



FIGURE 5
MIXED USE SITE PLAN

Gentry-Suisun
 HIGHWAY 16 & PENNSYLVANIA AVENUE
 SUISSON • CALIFORNIA

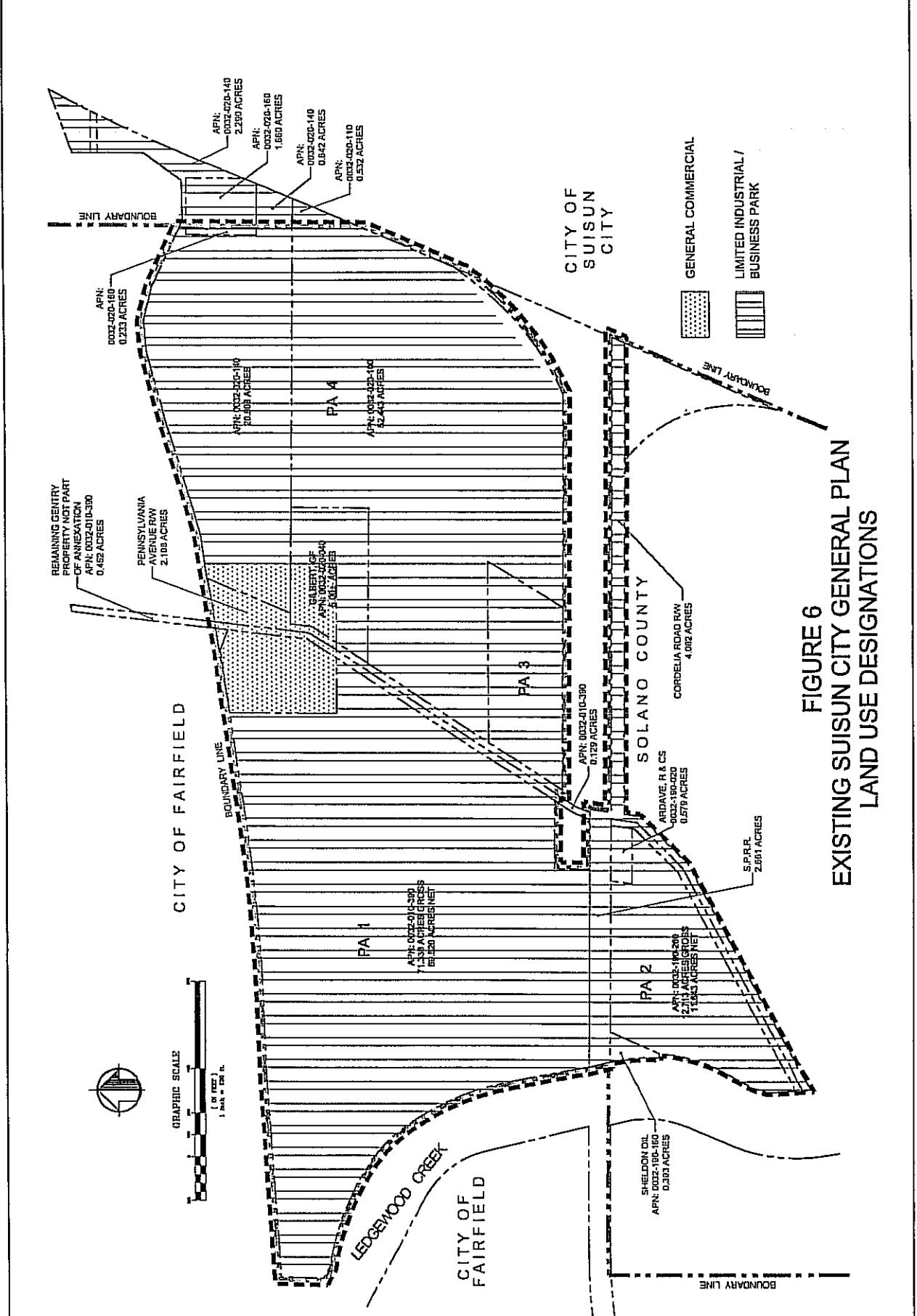


FIGURE 6
EXISTING SUISUN CITY GENERAL PLAN
LAND USE DESIGNATIONS

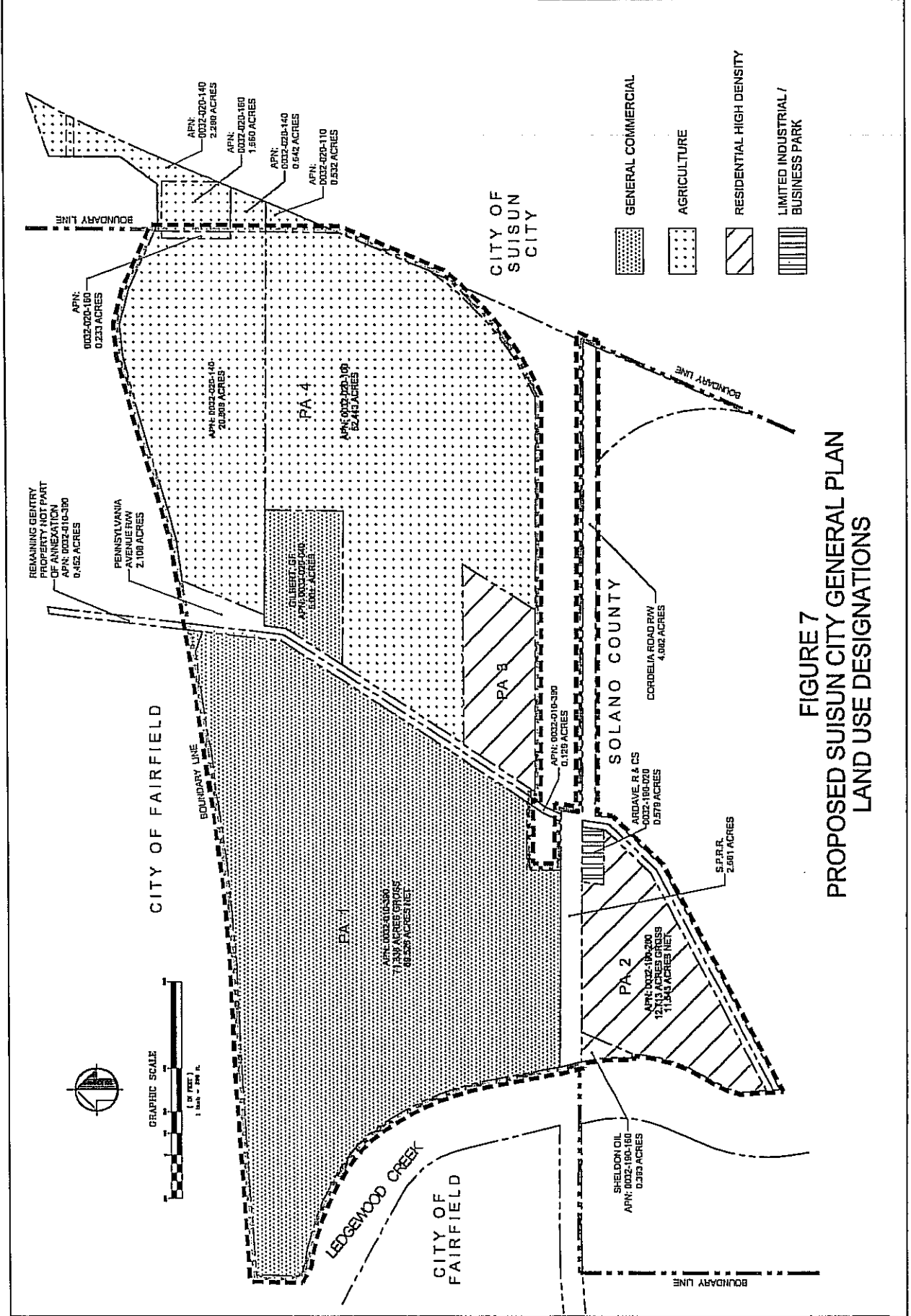
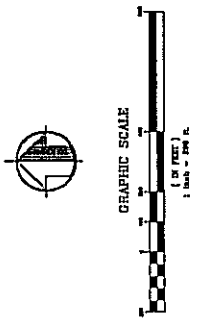


FIGURE 7
 PROPOSED SUISUN CITY GENERAL PLAN
 LAND USE DESIGNATIONS



APPENDIX B

Solano County Mosquito Abatement District

GARY RISBERG, President - Benicia
 JOE ANDERSON, Vice President - Dixon
 RONALD SCHOCK, Secretary - Trustee-at-Large
 MELVIN FROHRIB, Vallejo
 HOWARD LUTE, Suisun
 CHARLES TONNENSEN, Fairfield
 MILTON WALLACE, Rio Vista
 JIM N. WHALEN, Vacaville

2950 Industrial Ct.
 Fairfield, CA 94533-6500
 Telephone (707) 437-1116
 Fax (707) 437-1187

Meetings: Second Monday Every Month
 7:30 P.M.

JON A. BLEGEN, Manager
 CAROL EVKHANIAN, Biologist
 VICTOR BARACOSA, Supervisor
 TAMI WRIGHT, Sec./Bkpr.

April 8, 2005

Mr. Gerry Raycraft
 Community Development Director
 City of Suisun City
 701 Civic Center Boulevard
 Suisun City, CA 94585

**SUBJECT: NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT
 FOR THE PROPOSED GENTRY PROPERTY ANNEXATION**

Dear Mr. Raycraft:

The Solano County Mosquito Abatement District (SCMAD) appreciates the opportunity to provide input regarding its concerns pertaining to the Gentry Property Annexation.

The SCMAD is very interested in reviewing upcoming details regarding any wetland mitigation areas. There is the potential for creating habitat for several species of mosquitoes depending upon how long the water is present. One or more vectors of West Nile virus maybe among the species having the potential to be produced if proper design criteria are not utilized. During 2004, a total of 17 birds and one horse tested positive for West Nile virus within Solano County. No human cases occurred. To date one bird has tested positive from Rio Vista. West Nile activity has become evident earlier in 2005 than 2004. There is a great concern that human cases will occur in Solano County this year.

The SCMAD looks forward to reviewing the EIR for this project.

Please do not hesitate to contact the District is you have any questions.

Sincerely,

Jon A. Blegen
 Jon A. Blegen
 Manager

Carol Evkhanian
 Carol Evkhanian
 Biologist

Received
 via e-mail
 4-B-05
 JER

RECEIVED
 APR 18 2005
 CITY OF SUISUN CIT

STATE OF CALIFORNIA

ARNOLD SCHWARZENEGGER, Governor

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

RECEIVED

MAY 10 2005

CITY OF SUISUN CITY



May 6, 2005

File No.:183-48
SCH# 2004092077Gerry RayCraft
City of Suisun
701 Civic Center Boulevard
Suisun City, CA 94585

Dear Mr. RayCraft:

Re: Gentry Property Annexation

As the state agency responsible for rail safety within California, we recommend that any development projects planned adjacent to or near the rail corridor in the City be planned with the safety of the rail corridor in mind. New developments may increase traffic volumes not only on streets and at intersections, but also at at-grade highway-rail crossings. This includes considering pedestrian circulation patterns/destinations with respect to the Union Pacific Railroad right-of-way.

Safety factors to consider include, but are not limited to, the planning for grade separations for major thoroughfares, improvements to existing at-grade highway-rail crossings due to increase in traffic volumes and appropriate fencing to limit the access of trespassers onto the railroad right-of-way.

The above-mentioned safety improvements should be considered when approval is sought for the new development. Working with Commission staff early in the conceptual design phase will help improve the safety to motorists and pedestrians in the County.

If you have any questions in this matter, please call me at (415) 703-2795.

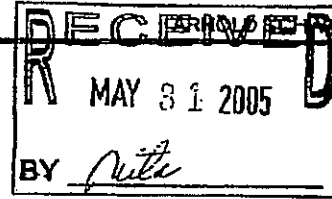
Very truly yours,

A handwritten signature in black ink, appearing to read "Kevin Boles".

Kevin Boles
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection and Safety Division

cc: Patrick Kerr, Union Pacific Railroad

STATE OF CALIFORNIA
PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013



BRUNO, Governor



May 27, 2005

File No. SCH 2004092077

Gerry Raycraft, Community Development Director
City of Suisun City
701 Civic Center Blvd.
Suisun City, CA 94585

Subject: Proposed EIR for the Suisun City Marketplace Project

Dear Mr. Raycraft:

As the state agency responsible for rail safety within California, we recommend that the proposed mixed-use Suisun City Marketplace project be planned with the safety of the rail corridor in mind. The proposed project is adjacent to the Union Pacific Railroad Company right-of-way. The full development of the project area will increase traffic volumes not only on streets and at intersections, but also at at-grade highway-rail crossings.

Safety considerations may include, but are not limited to, the following items:

- Grade separation of the crossings along major thoroughfares
- Fencing to limit the access of pedestrians onto the railroad right-of-way
- Improvements to warning devices at existing at-grade highway-rail crossings
- Improvements to traffic signaling at intersections adjacent to crossings
- Improvements to roadway geometry and lane striping near crossings
- Increased enforcement of traffic laws at crossings
- A safety awareness program on rail related hazards

The above-mentioned safety improvements should be considered when approval is sought for new developments; this includes mitigation measures at the Cordelia Road highway-rail at-grade crossing. Working with Commission staff early in the conceptual design phase will help improve the safety to motorists and pedestrians in the community.

Please advise us on the status of the project. If you have any questions in this matter, please contact me at (213) 576-7078 or at rxm@cpuc.ca.gov.

Sincerely,

Rosa Muñoz, PE
Utilities Engineer
Rail Crossings Engineering Section
Consumer Protection & Safety Division

cc: Richard Gonzales, UP

DEPARTMENT OF TRANSPORTATION

111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5505
FAX (510) 286-5559
TTY (800) 735-2929

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MAR 28 2005

CITY OF SUISUN CIT



*Flex your power!
Be energy efficient!*

March 23, 2005

SOL-12-R4.07
SOL012203
SCH 2004092077

Mr. Gerry Raycraft
City of Suisun
701 Civic Center Boulevard
Suisun City, CA 94585

Dear Mr. Raycraft:

Gentry Property Annexation – Notice of Preparation dated February 24, 2005

Thank you for continuing to include the California Department of Transportation (Department) in the environmental review process for the proposed project. We have reviewed the Notice of Preparation dated February 24, 2005 for the Gentry Property Annexation draft Environmental Impact Report 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 adequately address our concerns regarding the operation of State Route 12 and Interstate 80, we recommend the traffic impact analysis 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. Average Daily Traffic (ADT) and AM and PM peak hour volumes on all significantly affected streets and highways, including crossroads and controlling intersections.
3. Schematic illustration of the traffic conditions for: 1) existing, 2) existing plus project, 3) cumulative, and 4) cumulative plus project for the intersections and roadway segments in the project 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.

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 encourage the City of Suisun to continue its coordination of the preparation of the study with our office. Please see the Department's "Guide for the Preparation of Traffic Impact Studies" at the following website for more information:

<http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf>

We look forward to reviewing the traffic impact analysis and draft Environmental Impact Report for this project. Please send two copies to the address at the top of this letterhead, marked ATTN: Lisa Carboni, Office of Transit and Community Planning.

Encroachment Permit

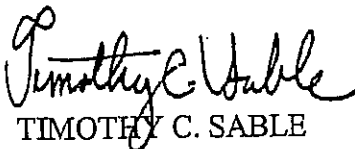
Work that encroaches onto the State Right of Way (ROW) requires an encroachment permit that is issued by the Department. Traffic-related mitigation measures will be incorporated into the construction plans during the encroachment permit process. See the following website link for more information:

<http://www.dot.ca.gov/hq/traffops/developserv/permits/>

To apply for an encroachment permit, submit a completed encroachment permit application, environmental documentation, and five (5) sets of plans (in metric units) which clearly indicate State ROW to the address at the top of this letterhead, marked ATTN: Sean Nozzari, Office of Permits.

Should you require further information or have any questions regarding this letter, please call Lisa Carboni of my staff at (510) 622-5491.

Sincerely,



TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Scott Morgan (State Clearinghouse)

DEPARTMENT OF TRANSPORTATION

111 GRAND AVENUE
P. O. BOX 23660
OAKLAND, CA 94623-0660
PHONE (510) 286-5505
FAX (510) 286-5559
TTY (800) 735-2929

RECEIVED

MAR 28 2005

CITY OF SUISUN CIT



*Flex your power!
Be energy efficient!*

March 23, 2005

SOL-12-R4.07
SOL012203
SCH 2004092077

Mr. Gerry Raycraft
City of Suisun
701 Civic Center Boulevard
Suisun City, CA 94585

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2. Average Daily Traffic (ADT) and AM and PM peak hour volumes on all significantly affected streets and highways, including crossroads and controlling intersections.
3. Schematic illustration of the traffic conditions for: 1) existing, 2) existing plus project, 3) cumulative, and 4) cumulative plus project for the intersections and roadway segments in the project 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.

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 encourage the City of Suisun to continue its coordination of the preparation of the study with our office. Please see the Department's "Guide for the Preparation of Traffic Impact Studies" at the following website for more information:

<http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf>

We look forward to reviewing the traffic impact analysis and draft Environmental Impact Report for this project. Please send two copies to the address at the top of this letterhead, marked ATTN: Lisa Carboni, Office of Transit and Community Planning.

Encroachment Permit

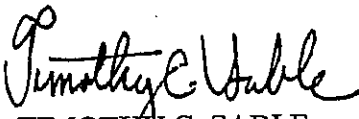
Work that encroaches onto the State Right of Way (ROW) requires an encroachment permit that is issued by the Department. Traffic-related mitigation measures will be incorporated into the construction plans during the encroachment permit process. See the following website link for more information:

<http://www.dot.ca.gov/hq/traffops/developserv/permits/>

To apply for an encroachment permit, submit a completed encroachment permit application, environmental documentation, and five (5) sets of plans (in metric units) which clearly indicate State ROW to the address at the top of this letterhead, marked ATTN: Sean Nozzari, Office of Permits.

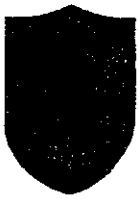
Should you require further information or have any questions regarding this letter, please call Lisa Carboni of my staff at (510) 622-5491.

Sincerely,



TIMOTHY C. SABLE
District Branch Chief
IGR/CEQA

c: Scott Morgan (State Clearinghouse)



DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500



RECEIVED

March 25, 2005

MAR 28 2005

CITY OF SUISUN CITY

Mr. Gerry Raycraft
City of Suisun City
701 Civic Center Boulevard
Suisun City, CA 94585

Dear Mr. Raycraft:

Gentry Property Annexation
Suisun City, Solano County
SCH 2004092077

Department of Fish and Game personnel have reviewed the Notice of Preparation (NOP) for the proposed annexation and mixed use development of the Gentry property. The City of Suisun City proposes to construct a mixed-use development on the site which includes a major retail center and residential housing.

According to the NOP, the project site is 498.482 acres of which 332.38 acres of the site are wetlands. The wetland habitats consist of alkali seasonal marsh, brackish marsh, seasonally saturated annual grassland, vernal pool, and riparian wetland habitat. These habitats and the impacts to each habitat type must be disclosed in the Environmental Impact Report (EIR).

The site contains many different special status species including the State and Federally endangered and fully protected salt marsh harvest mouse and the Federally endangered Contra Costa goldfields. The EIR must identify direct impacts to the species and also indirect impacts such as changes in hydrology and water quality due to project construction.

The project site has a high number of known special status species. A complete assessment of the flora and fauna within and adjacent to the project area and the disclosure of impacts to those species should be provided. Particular emphasis should

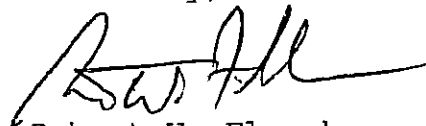
Gerry Raycraft
March 25, 2005
Page 2

be made in identifying endangered, threatened, and locally unique species and sensitive habitats. Rare, threatened and endangered species to be addressed should include all those which meet the California Environmental Quality Act (CEQA) definition (see CEQA Guidelines, Section 15380). The assessment should identify any rare plants and rare natural communities, following DFG's Guidelines for Assessing the Effects of Proposed Projects on Rare, Threatened, and Endangered Plants and Natural Communities (revised May 8, 2000). The Guidelines are available at www.dfg.ca.gov/whdab/pdfs/guideplt.pdf.

For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream, or use material from a streambed, DFG may require a Streambed Alteration Agreement (SAA), pursuant to Section 1600 et seq. of the Fish and Game Code, with the applicant. Issuance of SAAs is subject to CEQA. DFG, as a responsible agency under CEQA, will consider the CEQA document for the project. The CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for completion of the SAA. To obtain information about the SAA notification process, please access our website at www.dfg.ca.gov/1600; or to request a notification package, contact the Streambed Alteration Program at (707) 944-5520.

If you have any questions, please contact Greg Martinelli, Environmental Scientist, at (707) 944-5570; or Scott Wilson, Habitat Conservation Supervisor, at (707) 944-5584.

Sincerely,



Robert W. Floerke
Regional Manager
Central Coast Region

cc: State Clearinghouse



SUISUN-SOLANO WATER AUTHORITY
508 ELMIRA ROAD
VACAVILLE, CA 95687
(707) 448-6847



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April 5, 2005

Gerry Raycraft
Community Development Director
City of Suisun City
701 Civic Center Boulevard
Suisun City, CA 94585

Subject: *Notice of Preparation of an Environmental Impact Report for the Proposed Gentry Property Annexation, APNs 032-010-390, 032-020-040, 032-020-100, 032-020-110, 032-020-140, 032-190-020, 032-190-160, and 032-190-260*

Dear Gerry:

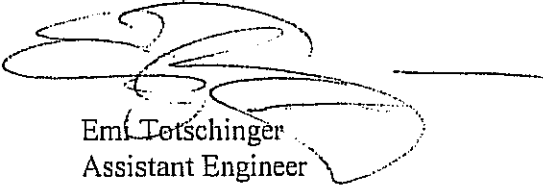
We are in receipt of the Notice of Preparation of an Environmental Impact Report for the Proposed Gentry Property Annexation located south of Highway 12, north of Pennsylvania Avenue and Cordelia Road, east of Ledgewood Creek, and west of the Union Pacific Railroad tracks. The proposed annexation consists of approximately 172.5 acres of land and an approximately 88.4 acre mixed-use development. The subject property is not currently located within the service area of the Suisun-Solano Water Authority (SSWA), however, it is in the annexation process and the City of Suisun City requested a Water Supply Assessment. The Water Supply Assessment for the Lands of Gentry, dated January 15, 2004, was approved by the SSWA Board of Directors on February 23, 2004 by Resolution Number 04-01. The following are SSWA's comments:

1. The development shall loop water pipelines for domestic service from the existing SSWA distribution system. A looped service may be constructed by connecting to the high pressure Gregory Hill 20" transmission main on the west side of the Union Pacific Railroad tracks opposite Benton Court, through a pressure reducing station, and then looping the pipeline through the new development and back across the railroad tracks into Old Town through the line in Cordelia Street. The six-inch line in Cordelia Street shall be replaced with a new 12-inch line.

2. The developer shall be responsible to contribute toward the cost of additional required water treatment facilities due to the increase in service area and maximum day demand of water service. These are usually reflected in water service connection fees paid by the developer.
3. All changes and additions to SSWA facilities shall be at the developer's expense.
4. The current SSWA water supply is from Solano Project allocations to Suisun City and the Solano Irrigation District (District). The Suisun City allocation is fully utilized, and all additional supply is from the District's allocation. In order to secure an allocation of the District's water supply, annexation to District, as well as Suisun City, shall be required according to District rules, regulations, and standards.
5. Submit all planning documents, maps, and improvement plans to SSWA for our opportunity to review and comment.
6. Per SSWA's Rules and Regulations and by California law, the SSWA certificate must be on the Final Map and SSWA must sign the Final Map
7. A SSWA standard Relocation and Protection of Facilities Agreement must be signed by the developer. If the developer proposes to change the standard agreement, then a fee of \$300 is required and all SSWA legal and staff time involved in the modification of the agreement will be billed to the developer.
8. Provide easements for all SSWA facilities that are not located in the public right-of-way.
9. The design of the facility will be reviewed by the SSWA engineer, Summers Engineering. The cost of the review shall be borne by the developer.
10. Electronic AutoCAD files are required upon the completion of the project showing "as-builts" for electronic archiving.
11. Construction shall be inspected by SSWA at the developer's expense.

Additional requirements will be added upon review of all maps and plans of this development. We request that a copy of the Draft EIR be sent for our review and comments. Thank you for the opportunity to review and comment on this project. If you have any questions, please contact me at (707) 455-4007 or email totschie@sidwater.org

Sincerely,

A handwritten signature in black ink, appearing to read "Emi Totschinger", is written over a horizontal line. The signature is stylized and somewhat abstract.

Emi Totschinger
Assistant Engineer

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GENTRY PROPERTY ANNEXATION
PUBLIC SCOPING MEETING

MARCH 22, 2005

6:00 P.M.

SUISUN CITY COUNCIL CHAMBERS
701 CIVIC CENTER BOULEVARD
SUISUN CITY, CALIFORNIA

COPY

Reported by:

Angela L. Weston
CSR No.: 11658

FACILITATORS

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Gerry Raycraft, Community Development Director
City of Suisun City
701 Civic Center Boulevard
Suisun City, California 94585
(707) 421-7335

Cindy L. Gnos, AICP, Project Manager
Raney Planning & Management, Inc.
1401 Halyard Drive, Suite 120
West Sacramento, California 95691
(916) 372-6100

1 SUISUN CITY, CALIFORNIA

2 MARCH 22, 2005, 6:00 P.M.

3 --oOo--

4 MR. RAYCRAFT: We're going to go ahead and get
5 started. Thank you for coming, my name is Gerry Raycraft,
6 I'm the City's interim special projects manager and acting
7 community development director. Tonight we're conducting
8 a scoping session for a project that the city has
9 undertaken entitled the Gentry Annexation. Some of you
10 may be aware, and I see some people in the audience that
11 will be aware, that we did this before. The City issued a
12 Notice Of Preparation for this project, prepared an EIR in
13 September of last year when the project consisted
14 primarily of just the annexation of the land that's under
15 discussion tonight. In the intervening time, however, the
16 developer changed the application to become more specific.
17 So the application now, in addition to the annexation,
18 also includes a planned unit development and a development
19 plan.

20 So rather than assume that people's comments at
21 that time sufficed for the project that now is being moved
22 forward, we felt it was prudent to actually start all over
23 again. So a new Notice Of Preparation was issued, I don't
24 have the exact date, but a couple of weeks ago, and
25 tonight we are conducting the scoping session to identify

1 concerns that the public has in terms of vis-a-vis the
2 preparation of the draft EIR.

3 A little bit about the process, and I hope you
4 can read that. If not, I can make a copy, but this is
5 pretty mundane and pretty standard in terms of the CEQA
6 process. The City has decided that they would prepare an
7 EIR of this project, so we issued a Notice Of Preparation,
8 and that was sent to all responsible agencies and other
9 interested parties.

10 What this does, is the NOP kicks off a 30-day
11 review period according to CEQA, which is the California
12 Environmental Quality Act, excuse me, and kicks off a
13 30-day comment period where people can formally submit
14 comments to the agency, the City of Suisun City, that is
15 preparing the EIR. Those comments then will be addressed
16 in the environmental document itself. So tonight's
17 meeting, March 22nd, it's the third box down there, the
18 scoping session, and once this event takes place, the
19 comments that we will receive will be assembled by our
20 consultants, I'll introduce them in just a minute, and
21 will be incorporated into the EIR in terms of concerns and
22 issues that will need to be addressed.

23 As I said, the City will then prepare the EIR.
24 Once the EIR is complete we will file what is called a
25 notice of completion, and that kicks off a 45-day review

1 period of that document. And once the -- during that time
2 responsible agencies, public agencies and public whomever,
3 respond to comments -- respond to the EIR in terms of
4 concerns, questions that they have. Those questions and
5 comments are required to be responded to in what's called
6 the final EIR, and that document then is submitted
7 formally to the decisionmaking body, which in this case is
8 the Suisun City city council. They can then adopt that
9 EIR if they find in their best judgment that the
10 environmental document adequately addresses all of the
11 environmental issues, provides adequate mitigation, or in
12 some occasions when adequate mitigation is not available,
13 they can make a finding of overriding considerations and
14 adopt the project.

15 And, again, in this case, as is different from
16 the project when it first was public last year, today the
17 project consists of the annexation, which includes a
18 couple of steps, a general plan amendment, pre-zoning, and
19 then also this project includes a PUD and a development
20 plan.

21 So I think that covers -- unless there is any
22 questions -- the process of what we are doing. Brian.

23 MR. MILLER: Will there be an independent
24 development and review process undertaken by the City of
25 Suisun, or have you already done that or what?

1 MR. RAYCRAFT: I'm not sure I understand.

2 MR. MILLER: Architecture, site planning,
3 everything associated with the actual development and
4 review for the shopping center.

5 MR. RAYCRAFT: Okay, the actual shopping center
6 will be subject to the City's normal designing review
7 process through the planning commission and ultimately the
8 city council.

9 MR. MILLER: So they have not submitted for that
10 yet, they have just submitted for the annexation?

11 MR. RAYCRAFT: No, The actual PUD --

12 MS. GNOS: The site plan.

13 MR. RAYCRAFT: Yeah, the site plan. Yeah, I
14 guess I'm misunderstanding exactly the nature of the
15 question, but they have submitted the site plan, and that
16 is going to be under review too, and will be the subject
17 of the -- part of the subject of the environmental
18 document in terms of traffic and whatever.

19 With that, I'm going to now turn this over to
20 Cindy Gnos, who is the project manager. Cindy is with
21 Raney Planning & Management, she is going to talk a little
22 bit about the project itself and go through the annexation
23 area as well as the planning area.

24 MS. GNOS: As described -- well, that maps not
25 working. And while he is getting an easier to read map, I

1 want to make sure you looked at all the materials on the
2 back of the table, and also there is a sign-in sheet. I
3 need to be sure that everybody who is here has signed in
4 so I can have and continue to update a mailing list and
5 make sure that you get future notices of meetings. There
6 is a copy of the NOP on the back table. And there is a
7 written comment form. If you don't -- if you think of
8 things that you didn't say tonight or you don't want to
9 speak in public, you can write your comments and fold it
10 in half and put a stamp on it and stick it in the mail.
11 It's already addressed to the City. So Gerry can get your
12 comments that way as well.

13 The NOP describes the project. It consists
14 of -- there are five planning areas that total almost 500
15 acres. The southernmost planning area that is shown as
16 Planning Area 5 is not proposed to be annexed and is not
17 proposed to be developed. So the total area that we're
18 looking at for annexation and development within the City
19 is about 175 acres, and it is split into four planning
20 areas.

21 Planning Area 1, I don't know if you -- it's on
22 the north there. That is the mixed-use development part
23 of it, planning Area 1, 2, and 3. The commercial
24 component of that mixed use -- and if you have the NOP in
25 front of you you can look at table 4 on page 8. Planning

1 Area 1 has 71 acres, and it -- the site plan is shown on
2 the wall behind you and it's also in the NOP. It includes
3 931,748 square feet of retail, and that retail includes --
4 there you go. So Planning Area 3 is this one here -- or
5 Planning Area 1, I'm sorry. It's 71 acres with over
6 900,000 square feet of commercial.

7 The commercial includes a range of retail uses,
8 none of which have been specifically identified at this
9 time, but they do include uses that could be a 24-hour
10 big-box type general merchandise store. They show in here
11 their access points and their parking, and this will be
12 the site plan that continues to go through the review
13 process.

14 Planning Area 2 and Planning Area 3 are
15 residential in nature. They total about 17 acres, and
16 would be developed at about 21 units per acre for a total
17 of 359 dwelling units. So the developed part of the
18 project includes over 900,000 square feet of retail and
19 almost 400 dwelling units over 80 acres.

20 The other -- there is a planning area on the
21 other side. Planning Area 4, right here, is primarily
22 designated agriculture, and that will remain an open
23 space. There is a small 5-acre parcel right here that has
24 been added to the application. That is new from last
25 time, and that would be designated general commercial,

1 although there isn't a specific development proposal for
2 that site at this time. And then the residential Planning
3 Area 3 is also located on that side of Pennsylvania
4 Avenue.

5 That is kind of the components of the
6 development itself. The EIR at this point, as shown in
7 the NOP, is proposed to have a chapter on aesthetics, a
8 chapter on air quality, one addressing biological
9 resources, one addressing hydrology and water quality.
10 We'll also look at land use and agricultural resources, as
11 well as noise, public services and utilities,
12 transportation and circulation and a socioeconomic
13 component of the project. Those are just kind of the
14 broad topics.

15 What we would like to hear from you tonight is
16 if there is anything specific about each of those topics
17 that you want to make sure we analyze in the EIR in more
18 detail. If you have any ideas on project alternatives,
19 tonight we are here to listen to your feedback on what the
20 EIR needs to include.

21 MR. RAYCRAFT: The podium doesn't have a mic,
22 but this is a relatively intimate group so I don't think
23 we need it. We also have a court reporter, so it's not --
24 we are not going to lose your comments in terms of
25 recording it. So there is a court reporter recording it.

1 So I think you covered the comment form, and
2 that's really important too. So I just want to emphasize
3 that those forms are there if you want to take one or two
4 or whatever, and you can send your comments back. If you
5 don't want to make a comment tonight, if you would rather
6 just pick up a form and write your comments, that is
7 perfectly acceptable. So not making a comment tonight is
8 not losing your opportunity.

9 MS. GNOS: And comments are due April 12th.

10 MR. RAYCRAFT: One last thing, and I think
11 pretty much everybody knows this, but this is an
12 opportunity as a scoping session to kind of define the EIR
13 in terms of what it needs to look at. It's not at this
14 point a forum to debate the project in terms of pro or con
15 or like or dislike. So if you could please try to focus
16 your comments on what the environmental document needs to
17 look at in order to adequately address your specific
18 individual concerns.

19 MR. JANSEN: My name is Eric Jansen,
20 representing the City of Vallejo water division. We have
21 a 36-inch water main going through the site, and we have
22 very major concerns to make sure that the waterline is
23 protected. That waterline does serve the Talinas area,
24 that waterline does serve Travis Air Force Base, and in
25 some cases that waterline can serve the City of Vallejo

1 proper.

2 The first concern is that because it is a
3 36-inch water main, it is very difficult to relocate
4 easily. It takes a lot of space in the profile. So that
5 has to be addressed, not in detail, but maybe in some
6 generalities of what protection is going to be provided to
7 that waterline. The plans in PA-1 show that waterline
8 being relocated. The City of Vallejo Water Division shall
9 approve all relocation plans.

10 The other issue that needs to be addressed is
11 when the waterline is relocated, in order to do the
12 relocation a disruption will be required. That disruption
13 has to be somehow coordinated so that these various
14 agencies are not put out of water, such as the Travis Air
15 Force Base and Talinas. Basically we provide the Talinas
16 area of all water.

17 The other concern -- and I think City of Vallejo
18 shall approve all relocation of its waterline. And the
19 other thing, this is the major one, is that that waterline
20 was installed in the early 50s, and we have an easement
21 and we want to make sure that the City of Vallejo
22 maintains its prior rights of easements in this area so
23 that if the waterline is relocated that we will have
24 easements before anybody else has them.

25 The other issue is the City of Vallejo does not

1 want to be put in a worse hydrolic position than before
2 with that waterline. Right now it's fairly straight. If
3 you put a lot of 90-degree bends in it it makes it
4 hydraulically worse than it was before, so that has to be
5 covered and somehow addressed in the EIR. That's all the
6 comments the City has.

7 MR. RAYCRAFT: Thank you, Mr. Jansen.

8 MR. CHAPPEL: Steve Chappel, executive director
9 of the Suisun Resource Conservation District, 2544 Grizzly
10 Island Road, Suisun Marsh, Suisun, California. I did come
11 before you on the previous NOP scoping meeting. I think
12 our comments that were provided at that time still stand.
13 We will be providing another letter.

14 I guess just looking at your staff report here,
15 I think one of the major issues is the wetland resources
16 adjacent to the site and the potential conflicts with
17 developing urban centers with close proximity to the
18 Suisun Marsh Plan Protection. The conflicts that that has
19 presented us, from mosquitoes, smoke, smell.

20 The marshes are a preexisting condition, you are
21 building -- proposing to expand a large urban center in
22 the vicinity of that. All of that must be in the
23 disclosure for any future development so that it avoids
24 and minimizes conflict. As well as there is waterfowl
25 hunting clubs in the immediate vicinity, and seasonally

1 there is hunting activities going on in those locations,
2 and I have concerns that the citizens would have comments
3 and issues with that.

4 Secondly, my original comments when we came here
5 was the Area 5 is the boundary -- within the boundary of
6 the Suisun Marsh Preservation Act and the Suisun Resource
7 Conservation District. I understand that that is not
8 proposed for development, but Project Area 1 has
9 significant wetland resources on the site. I think
10 anybody can drive by there today to take a look at that.
11 I'm reading the staff report, it states somewhere in the
12 vicinity of 33 acres of wetlands will be impacted. I'd
13 like the mitigation plan to clearly outline how those
14 wetland functions and values are going to be mitigated
15 for. Just purchasing the existing wetlands in Parcel Area
16 4 and calling them conserved, those are existing wetlands,
17 the value and functions are already there, so I don't know
18 how you can fill and destroy wetlands and just acquire an
19 adjacent piece of property that is currently wetlands and
20 propose that the mitigation and values for those wetland
21 areas have been replaced.

22 Secondly, wetlands to themselves are unique, but
23 the wildlife resources and values that are provided by
24 those wetlands are critical. We have factors of
25 disturbances, human disturbance, people walking their

1 dogs, all that would influence existing wildlife
2 populations that are using those wetland resources today,
3 and I think that that needs to be an issue addressed in
4 the effects analysis.

5 It says, "The total amount of habitat lost is
6 less than 2 percent of existing wetlands within the
7 LedgeWood Creek watershed area which is located within the
8 Cities of Suisun City and Fairfield and Solano County"; if
9 that is implying that is insignificant because there is
10 52,000 acres of wetlands in Suisun Marsh, I think that is
11 a little disingenuous. The project needs to consider its
12 direct effect on wetlands and how those impacts are going
13 to be mitigated or avoided.

14 Some of the other issues that we do have
15 concerns with is storm drain runoff. I notice now -- I do
16 appreciate a little more detailed description of the
17 project site. I see that there is large areas of parking
18 lots. All of those developed areas are going to have oil
19 from vehicles, heavy metals off of brake shoes, things
20 like that, is there a pollution control plan for storm
21 drain runoff? All of that will flow downstream into the
22 marsh. Many of these sloughs are known to be critical
23 habitat for many wetland species, including beta fishes
24 like Delta smelt, splittail. If these pollutions are
25 being contributed to the tributaries of the marsh, it

1 needs to have a control plan to minimize or avoid those
2 effects.

3 And just the overall hard surface. Right now
4 the wetlands is there to serve as a value to retain
5 stormwater and evaporate off and trickles into the marsh.
6 If we put hard surfaces, I believe it was 90,000 square
7 feet of retail surface, all of that surface water will
8 come off hard surfaces and increase peak flows into the
9 marsh, including the homes and dwellings. So that is a
10 concern for us that it may increase downstream flooding of
11 the marsh if there is not stormwater retention onsite and
12 not drain directly into Ledgewood Creek. I look forward
13 to working with the staff and we will be participating and
14 commenting on the draft EIR.

15 MR. RAYCRAFT: Thank you.

16 MR. MILLER: Yes, I'm Brian Miller with the City
17 of Fairfield Planning Department. We also commented in
18 the fall of last year and we will be presenting a formal
19 letter on this particular revision. Our concerns will
20 primarily focus on a variety of issues, some of which have
21 been raised by the previous gentleman.

22 Hydrological impact, not only on the marsh, but
23 also on the City of Fairfield. There is some significant
24 waterflow and hydrological flow issues in the area between
25 the site and the City of Fairfield, and we are concerned

1 about flooding issues, we are concerned about significant
2 traffic-flow issues, regional air quality issues, economic
3 impact. Socioeconomic impact analysis has to address
4 impact on existing commercial areas, both in the City of
5 Fairfield as well as Suisun.

6 In addition, we are concerned about some public
7 service issues. Are there planned recreational facilities
8 in this area or will the residents of the residential
9 units be using City of Fairfield park facilities. So we
10 do intend to, again, provide a written letter with some of
11 these issues and we will work with you during this
12 process.

13 MR. RAYCRAFT: Thank you.

14 MS. BRUCE: My name is Kristin Bruce, I'm a
15 resident near the proposed site. 3490 O'Rehr Road, which
16 is technically in Fairfield. It's unincorporated.

17 MR. RAYCRAFT: How do you spell the name?

18 MS. BRUCE: Kristin, K-r- --

19 MR. RAYCRAFT: The street name.

20 MS. BRUCE: O'-R-E-H-R. It's about three-fourths
21 of a mile from the site where we live. And in my view,
22 aesthetics is extremely important. Views from the marsh
23 and just the potential for urban sprawl is important, and
24 the cumulative impact, meaning that it's going to
25 stimulate more growth, needs to be addressed.

1 Also concerns about the local economy and the
2 establishment with the big-box establishment. Keeping
3 Suisun a small-town atmosphere and protecting the local
4 family businesses should be looked at also.

5 Pretty much mirror Steve's comments about the
6 wetland concerns, but I do want to add that just on my
7 drives by I have seen species of concern, such as water
8 birds, waterfowl, shorebirds, wading birds, so there is
9 definitely a lot of value to those sort of creatures out
10 there that is to be looked at.

11 My concern also is that if there is any surveys
12 to be done that it should include a year-round survey so
13 it can capture migrant use, migratory use, and also
14 short-term use, which Suisun Marsh is particularly
15 important for.

16 Of course also concerns over pollution and
17 sediment going down the creek. And being located on a
18 property pretty close to the creek, I'm very concerned
19 about flooding impacts on that level, on a personal level.
20 Hoping the house doesn't flood. Concerns about traffic,
21 traffic impacts. The Cordelia Road that is used almost
22 like a freeway. I'm concerned about what an establishment
23 like that would have on traffic.

24 And like Steve was saying, I'm also concerned
25 about the residents there and quality-of-life type issues

1 for them. We know about mosquitoes, West Nile virus. And
2 being located close to the marsh, I know that there is
3 residents on the hill by 680 that have problems with the
4 shooting noise from across the other side of the freeway.
5 So I think a disclosure would be a good idea, not just for
6 sale, but for rental also too, and that would be important
7 for them.

8 Also should be looked into the structural
9 integrity of the -- especially planning the mixed-use
10 area, because that pond and filling it in, and I don't
11 know what impacts that could have. And that's it.

12 MR. RAYCRAFT: Thank you.

13 MR. ARDAVE: I'm Bob Ardave of Nor Cal Concrete
14 on the corner of Cordelia and Pennsylvania Avenue. I'm
15 just wondering how they are going to build on that lowland
16 out there. I guess they are going to fill it up, but then
17 we are going to be lower than the neighbor. We start our
18 business in the summertime at 5 o'clock in the morning,
19 and I'm just wondering how we are going to be neighbors.
20 Plus all the traffic that it's going to create on Cordelia
21 Road. We'll have to wait to get our trucks out of there,
22 I guess, in the morning.

23 MR. RAYCRAFT: Your comment related to traffic
24 is related to your business?

25 MR. ARDAVE: Yeah, it's right there on the

1 corner of Cordelia and Pennsylvania Avenue, and it's going
2 to have an impact on my people trying to get to work.
3 And plus the drainage and us being low. The only way I
4 think you can build on it is to fill it up, okay, so that
5 is going to leave our parcel lower than the surrounding
6 parcels. And right now after they dredged the sloughs
7 here a couple of years ago, we don't have no problem out
8 there right now. That's it.

9 MR. RAYCRAFT: Thank you very much. Unless
10 there is somebody else, I want to thank you all for
11 coming. So we have got everything down in terms of the
12 comments. Again, there is the form in the back if you
13 want to take one and make your comments clearer or you
14 think of something later. The comment period ends April
15 12th, so you should get your comments into the City before
16 that date. Thank you very much.

17 (End of requested proceedings
18 6:30 p.m.)

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REPORTER'S CERTIFICATE

---oOo---

I, ANGELA L. WESTON, certify that I was the Official Reporter, pro tem, and that I reported verbatim in shorthand writing the foregoing proceedings; that I thereafter caused my shorthand writing to be reduced to typewriting, and the pages numbered 1 through 19, inclusive, constitute a complete, true and correct record of said proceedings:

IN WITNESS WHEREOF, I have subscribed this certificate at Sacramento, California, on this 24th day of March, 2005.


ANGELA L. WESTON
CSR NO. 11658

**INITIAL STUDY
GENTRY – SUISUN PROJECT**

I. BACKGROUND

1. Project Title: Gentry-Suisun Project

2. Lead Agency Name and Address: City of Suisun City
701 Civic Center Blvd.
Suisun City, CA 94585

3. Contact Person and Phone Number: Ben Hulse, Contract Project Consultant
(707) 421-7396

4. Project Location: West of Suisun City limits in northwest corner of a junction in the
Union Pacific Railroad tracks. Pennsylvania Avenue, south of
State Route (SR) 12, diagonally transects the approximate center
of the project area in a northeast/southwest direction.
Solano County, California

5. Project Sponsor's Name and Address: City of Suisun City
Jake Raper, Community Development Director
701 Civic Center Blvd.
Suisun City, CA 94585
(707) 421-7396

6. General Plan Designation: Limited Industrial/Business Park
General Commercial

Adjacent Designations include: General Commercial (SC)
Service Commercial (Fairfield)
Residential Low Density (SC)
Residential Low Medium Density (Fairfield)
Residential High Density (Fairfield)
Mixed Use (Fairfield)

7. Zoning: Solano County
Agriculture-40

Adjacent Zoning includes:
General Commercial
Residential Medium Density

8. Project Description Summary:

The proposed Gentry-Suisun project includes the annexation of approximately 171.50 acres of land to the City of Suisun City and the development of approximately 87.82 acres with a mixed-use project. The project includes four planning areas, one of which would not be developed, but would remain as open space. Planning Areas 1-3 would be developed for the proposed project.

II. SOURCES

The following documents are referenced information sources utilized by this analysis:

1. City of Suisun City General Plan (Vol. I), May, 1992.
2. Northwest Information Center, Record Search Results for the Proposed Suisun Gentry Project, February 24, 2006.
3. United States Department of Agriculture, Soil Conservation Service, Solano County Soil Survey, 1977.

III. 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.

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Agriculture | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Hydrology/Water Quality | <input checked="" type="checkbox"/> Land Use & Planning |
| <input checked="" type="checkbox"/> Energy | <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Population & Housing |
| <input checked="" type="checkbox"/> Public Services | <input checked="" type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation & Circulation |
| <input checked="" type="checkbox"/> Utilities/Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance | |

IV. DETERMINATION

On the basis of this initial study:

- 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 applicant. 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” 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 (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

Jake Raper, Community Development Director
Printed Name

City of Suisun City
For

V. BACKGROUND AND INTRODUCTION

This Initial Study provides an environmental analysis pursuant to the California Environmental Quality Act (CEQA) for the annexation of approximately 171.50 acres of land and an approximately 87.82 acres of mixed use development within the area to be annexed for the Gentry Property Annexation Project (proposed project).

The City of Suisun City General Plan EIR is a program EIR, prepared pursuant to Section 15168 of the California Environmental Quality Act (CEQA) Guidelines (Title 14, California Code of Regulations, Sections 15000 et seq.). The Suisun City General Plan EIR analyzed full implementation of the Suisun City General Plan Update and identified measures to mitigate the significant adverse project and cumulative impacts associated with the General Plan.

The purpose of this Initial Study is to evaluate the potential environmental impacts of the project with respect to the Suisun City General Plan EIR to determine what level of additional environmental review, if any, is appropriate.

Mitigation measures identified in the City of Suisun City General Plan EIR that applies to the proposed project would be required to be implemented as part of the project. These mitigation measures may be further clarified to address impacts specific to this project. Project-specific mitigation measures for new potentially significant impacts that were not previously identified in the

City of Suisun City General Plan EIR would also be required to be implemented as part of the proposed project.

VI. PROJECT DESCRIPTION

The proposed project involves two main components, the “Annexation” component and the “Mixed-Use Development” component, as described below:

PROJECT COMPONENTS

Annexation

The annexation component consists of the annexation of approximately 171.50 gross acres of land (the “Annexation Property”)¹ from Solano County into the City of Suisun City as shown in Table 1 (See Figure 1). The Annexation Property consists of the five properties which include a Mixed-Use site, several Gentry Parcels, the Ardave Parcel, the Gilbert Parcel, and various rights-of-way.

Table 1 Annexation Property	
Description	Gross Acreage
A site on which a mixed-project would be developed (see below). Referred to herein as the “Mixed-Use Site.”	87.82
The parcels that comprise Planning Area 4 to the extent that they are not already located within the boundaries of the City of Suisun City.	69.28
The parcel owned by R& CS Ardave (APN 0032-190-020). Referred to herein as the “Ardave Parcel.”	0.58
The parcel owned by GF Gilbert (APN 0032-020-040). Referred to herein as the “Gilbert Parcel.”	5.00
Various rights of way including portions of Pennsylvania Avenue, Cordelia Road, State Route 12 and UPRR track. Collectively referred to herein as the “Rights of Way.”	8.82
TOTAL:	171.50

¹ Approximately 157.10 gross acres of the Annexation Property are currently owned by Gentry and approximately 14.79 gross acres are currently public land or owned by other parties.

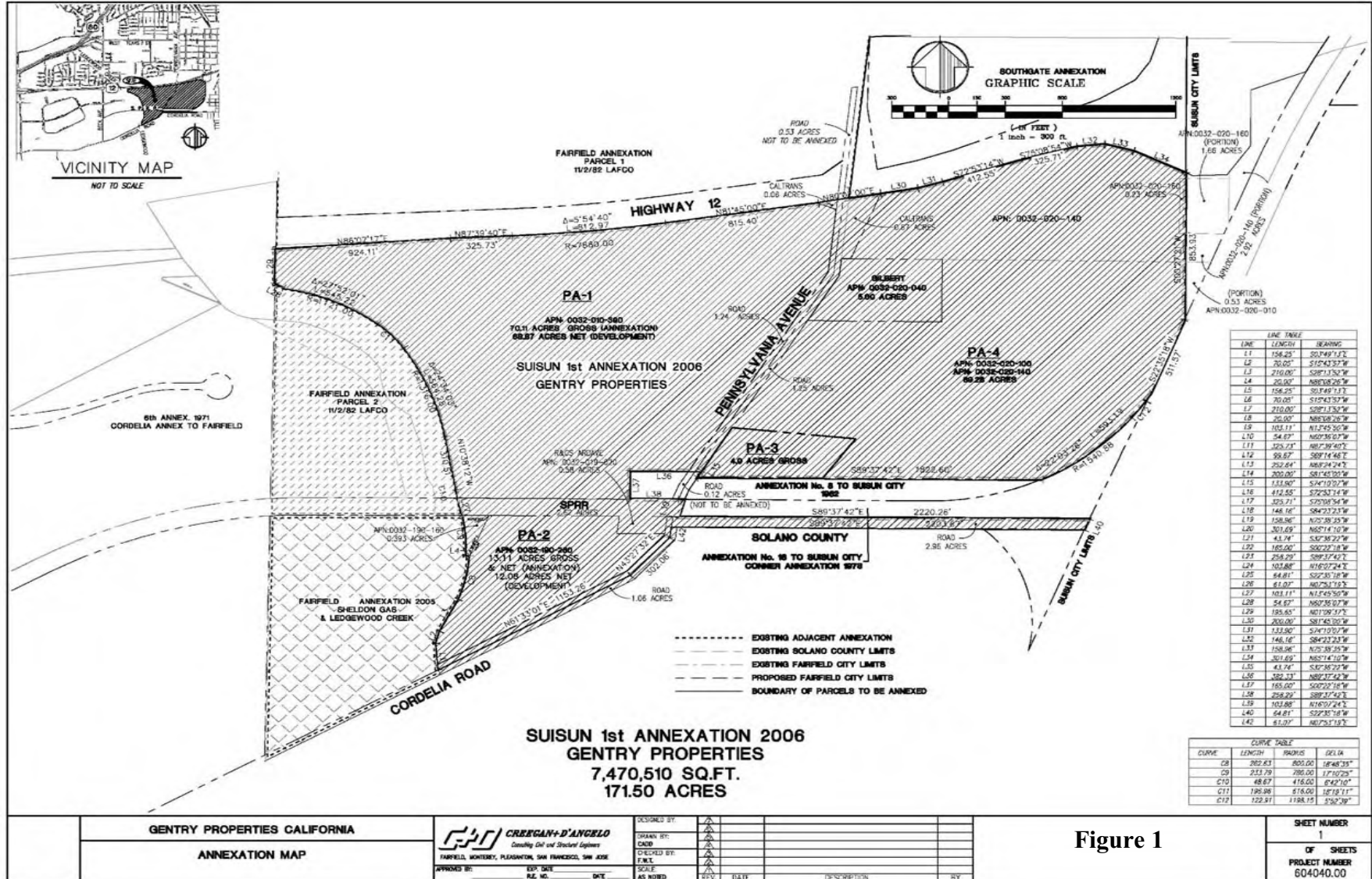


Figure 1

<p>GENTRY PROPERTIES CALIFORNIA</p> <p>ANNEXATION MAP</p>	<p>CRISGAN+D'ANGELO Consulting Civil and Structural Engineers FAIRFIELD, MONTEREY, PLEASANTON, SAN FRANCISCO, SAN JOSE</p>	<p>DESIGNED BY: [Signature]</p> <p>DRAWN BY: CAD</p> <p>CHECKED BY: [Signature]</p> <p>SCALE: [Signature]</p> <p>AS NOTED: [Signature]</p>	<p>Figure 1</p>	<p>SHEET NUMBER 1</p> <p>OF SHEETS</p> <p>PROJECT NUMBER 604040.00</p>
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Mixed-Use Development

The Mixed-Use Development component consists of the subdivision and development of a mixed-use project on the approximately 87.82-acre Mixed-Use Site and is comprised of Planning Area 1, Planning Area 2 and Planning Area 3. Wetland mitigation areas will be created on Planning Area 4 for impacts of the Mixed-Use Development component of the project for all three variations of the project, described below.

Base Project

Planning Area 1 (approximately 70.71 gross acres) encompasses the northern portion of the Mixed-Use Site and is intended primarily for the development of a major retail center to meet the retail and commercial needs of residents of Suisun City and the region. Planning Area 1 would have a mix of retail tenants, which may include small shops, general merchandise stores, “big box” establishments such as a supercenter² and/or a home improvement center, and service providers.

Planning Area 2 (approximately 13.11 gross acres) encompasses the southern portion of the Mixed-Use Site, and is intended for the development of approximately 275 town homes. Current development plans for this Planning Area include two- and three-story single family attached and/or detached for sale housing. Designed around pedestrian walkways weaving through village-type housing connected to pocket parks, the project is oriented towards first time buyers. Planning Area 2 includes the 0.393 acre parcel owned by Sheldon Oil, referred to herein as the “Sheldon Oil Parcel.”

Planning Area 3 (approximately 4.00 gross acres) is located just northeast of the intersection of Pennsylvania Avenue and the existing Union Pacific Railroad (UPRR) tracks, and is intended for the development of approximately 84 town homes. Current plans for this area are similar to those for Planning Area 2.

Alternative 1

Planning Area 1 (approximately 70.71 gross acres) encompasses the northern portion of the Mixed-Use Site and is intended primarily for the development of a major retail center and an approximately 120-unit residential component (duet homes) to meet the retail, commercial, and residential needs of residents of Suisun City and the region. Planning Area 1 would have a mix of retail tenants, which may include small shops, general merchandise stores, “big box” establishments such as a supercenter and/or a home improvement center, and service providers.

Planning Area 2 (approximately 13.11 gross acres) encompasses the southern portion of the Mixed-Use Site, and is intended for the development of approximately 196 units of medium- to high-density residential units which would include town homes and duet units. Current development plans for this Planning Area include two- and three-story single family attached and/or detached for sale

² As used in this project description, the term “supercenter” is intended to refer to a retail tenant with a building size of approximately 200,000 square feet that will include grocery, general merchandise, and a garden center. A supercenter would presumably operate 7 days a week and up to 24 hours a day.

housing. Designed around pedestrian walkways weaving through village-type housing connected to pocket parks, the project is oriented towards first time buyers. Planning Area 2 includes the 0.393 acre parcel owned by Sheldon Oil, referred to herein as the “Sheldon Oil Parcel.”

Planning Area 3 (approximately 4.00 gross acres) is located just northeast of the intersection of Pennsylvania Avenue and the existing Union Pacific Railroad (UPRR) tracks, and is intended for the development of approximately 84 medium- to high-density residential units which would include town homes. Current plans for this area are similar to those for Planning Area 2.

Alternative 2

Planning Area 1 (approximately 70.71 gross acres) encompasses the northern portion of the Mixed-Use Site and is intended for the development of approximately 42.04 acres of retail and commercial space as well as the development of an approximately 147-unit residential component (duet homes) and approximately a 103-unit single-family lot component to meet the retail, commercial, and residential needs of residents of Suisun City and the region. Planning Area 1 would have a mix of retail tenants, which may include small shops, general merchandise stores, a “big box” establishment such as a supercenter and/or a home improvement center, and service providers. In addition, Alternative 2 would add a residential development component as well.

Planning Area 2 (approximately 13.11 gross acres) encompasses the southern portion of the Mixed-Use Site, and is intended for the development of approximately 196 units of medium- to high-density residential units which would include town homes and duet units. Current development plans for this Planning Area include two- and three-story single family attached and/or detached for sale housing. Designed around pedestrian walkways weaving through village-type housing connected to pocket parks, the project is oriented towards first time buyers. Planning Area 2 includes the 0.393 acre parcel owned by Sheldon Oil, referred to herein as the “Sheldon Oil Parcel.”

Planning Area 3 (approximately 4.00 gross acres) is located just northeast of the intersection of Pennsylvania Avenue and the existing Union Pacific Railroad (UPRR) tracks, and is intended for the development of approximately 84 medium- to high-density residential units which would include town homes. Current plans for this area are similar to those for Planning Area 2.

DISCRETIONARY ACTIONS

Annexation of Mixed-Use Site, Rights of Way, Ardave Parcel, and Gilbert Parcel

Approximately 171.50 gross acres of land would be annexed by Suisun City, pursuant to Division II of Title 17 of the City Code. The area to be annexed includes approximately 14.79 gross acres of land that is not owned by the applicant: the Sheldon Oil Parcel (part of the Mixed-Use Site); the Rights of Way; the Ardave Parcel; and the Gilbert Parcel. The annexation must be approved by both the City and the Solano County Local Agency Formation Commission.

General Plan Amendments - Mixed-Use Site (Planning Areas 1, 2, and 3)

General Plan Land Use Designations for Mixed-Use Site

The land use map in the City's General Plan would be amended to accommodate the Mixed-Use Development component of the project, pursuant to City Code Chapter 17.56. Because all portions of the Mixed-Use Site are located within the Suisun City Sphere of Influence, General Plan land use designations have been assigned to all of the Mixed-Use Site by Suisun City.³ Suisun City designates all of the Mixed-Use Site as Limited Industrial / Business Park, except for an area bordering Pennsylvania Avenue at the northern end of the site, which is designated General Commercial. The Suisun City General Plan is therefore proposed to be amended to include General Commercial and medium and high-density residential.

Base Project

- Planning Area 1 of the Mixed-Use Site would be redesignated from Limited Industrial / Business Park and General Commercial to General Commercial.
- Planning Area 2 of the Mixed-Use Site would be redesignated from Limited Industrial / Business Park to Residential High Density.
- Planning Area 3 of the Mixed-Use Site would be redesignated from Limited Industrial / Business Park to Residential High Density.

Table 2, below, shows the maximum density permitted for the Mixed-Use Site for the Base Project, pursuant to the General Plan (as amended).

Although Table 2 identifies the maximum buildout potential for the proposed land use designations, the Base Project, as indicated for Planning Area 1 on the site plan (Figure 2), includes the development of 655,499 square feet. This EIR will analyze the development of the proposed project in Planning Area 1 plus the potential 65,340 square feet of retail on the Gilbert Parcel and 15,682 square feet of office for the Ardave parcel.

Alternative 1

- Planning Area 1 of the Mixed-Use Site would be redesignated from Limited Industrial / Business Park and General Commercial to General Commercial and Residential Medium Density.
- Planning Area 2 of the Mixed-Use Site would be redesignated from Limited Industrial / Business Park to Residential High Density.

³ In addition, because the Mixed-Use Site is currently within Solano County, the County has assigned it the following land use designations: Intensive Agricultural (for the portion to the north of the UPRR tracks) and Extensive Agricultural (for the portion to the south of the UPRR tracks).

- Planning Area 3 of the Mixed-Use Site would be redesignated from Limited Industrial / Business Park to Residential High Density.

Table 3, below, shows the maximum density permitted for the Mixed-Use Site for Alternative 1, pursuant to the General Plan (as amended). Although Table 3 identifies the maximum buildout potential for the proposed land use designations, Alternative 1, as indicated for Planning Area 1 on the site plan (Figure 3), includes the development of 70.71 acres. This EIR will analyze the development of Alternative 1 in Planning Area 1, plus the potential 10,000 square feet of retail on the Gilbert Parcel, and 4,000 square feet of office and 14,000 square feet of limited industrial on the Ardave Parcel.

Table 2 Maximum Density of Mixed-Use Site – Base Project After General Plan Redesignation			
Planning Area	Density	Site Area (gross acres)	Max. Development
Planning Area 1	0.30 FAR	± 70.71	655,499 sf of Retail
Planning Area 2	21 dwelling units/acre	± 13.11	Approx. 275 dwelling units
Planning Area 3	21 dwelling units/acre	± 4.00	Approx. 84 dwelling units
Totals		± 87.82	655,499 sf of Retail plus 359 dwelling units

Table 3 Maximum Density of Mixed-Use Site – Alternative 1 After General Plan Redesignation			
Planning Area	Density	Site Area (gross acres)	Max. Development
Planning Area 1 – General Commercial	0.30 FAR	± 70.71	480,000 sf of Retail
Planning Area 1 - Residential	15 dwelling units/acre		Approx. 120 dwelling units
Planning Area 2	21 dwelling units/acre	± 13.11	Approx. 196 dwelling units
Planning Area 3	21 dwelling units/acre	± 4.00	Approx. 84 dwelling units
Totals		± 87.82	480,000 sf of Retail plus 400 dwelling units

Figure 2
Base Project Site Plan

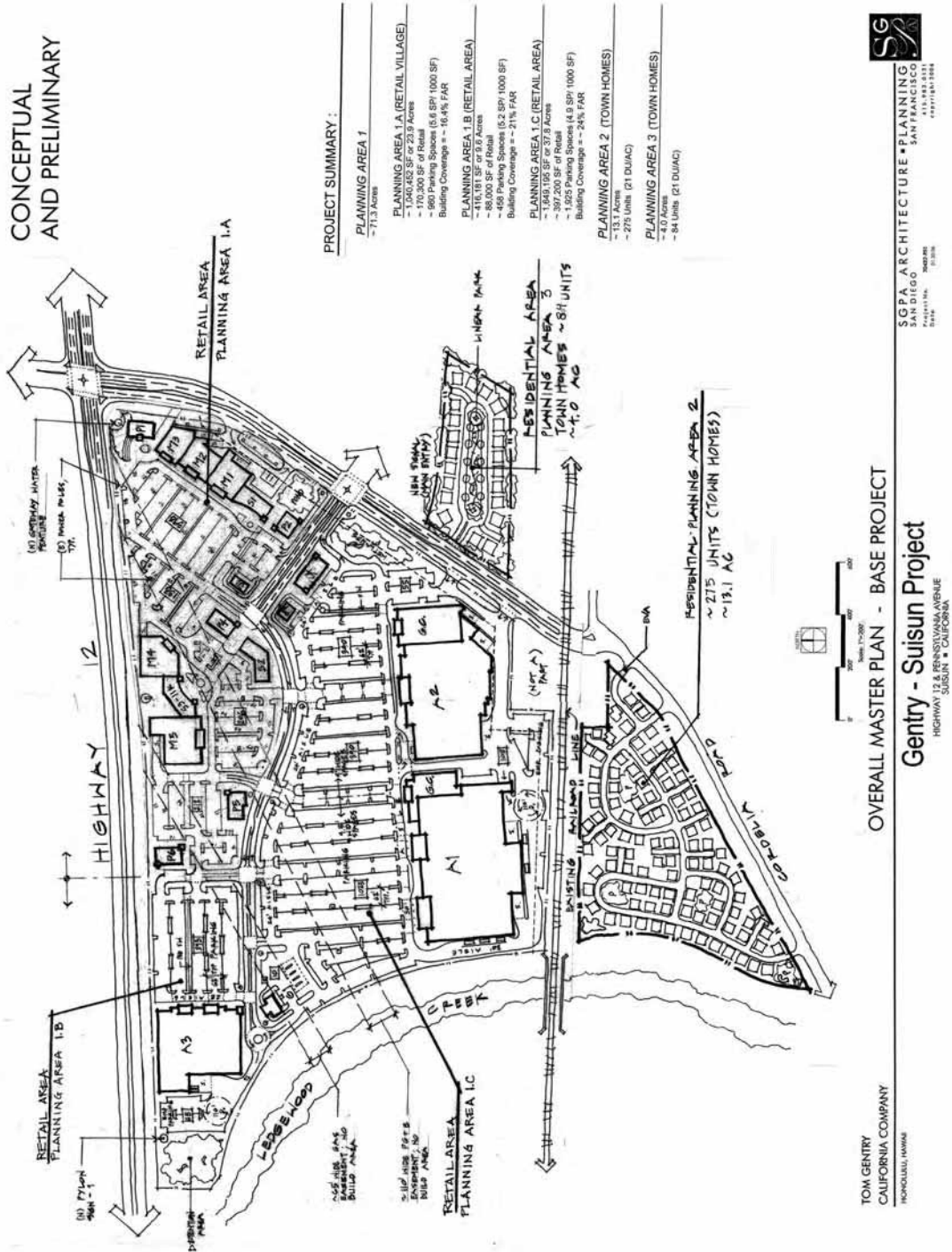
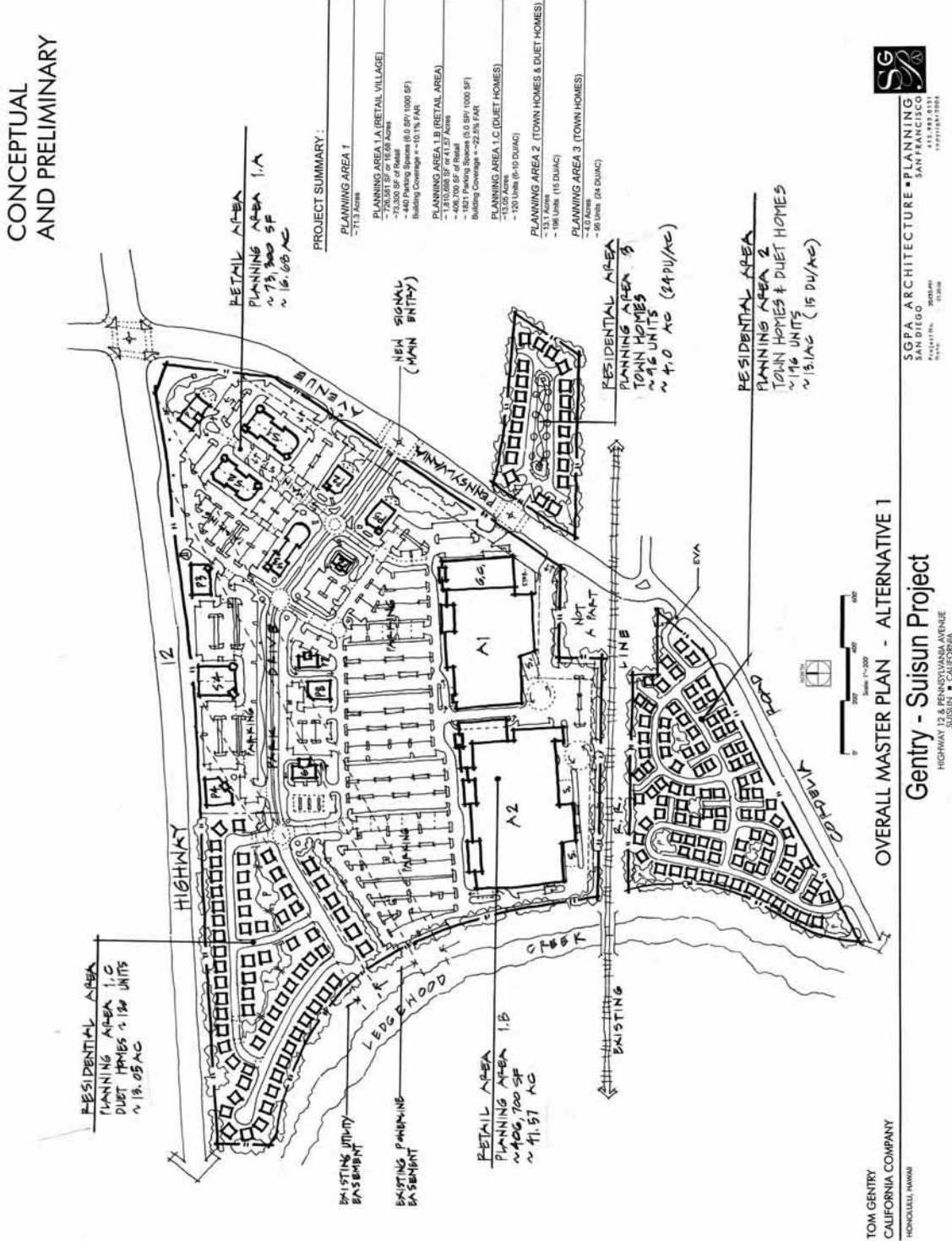


Figure 3
Alternative 1 Site Plan



Alternative 2

- Planning Area 1 of the Mixed-Use Site would be redesignated from Limited Industrial / Business Park and General Commercial to General Commercial and Residential Medium Density.
- Planning Area 2 of the Mixed-Use Site would be redesignated from Limited Industrial / Business Park to Residential High Density.
- Planning Area 3 of the Mixed-Use Site would be redesignated from Limited Industrial / Business Park to Residential High Density.

Table 4, below, shows the maximum density permitted for the Mixed-Use Site for Alternative 2, pursuant to the General Plan (as amended).

Table 4 Maximum Density of Mixed-Use Site- Alternative 2 After General Plan Redesignation			
Planning Area	Density	Site Area (gross acres)	Max. Development
Planning Area 1 – General Commercial	0.30 FAR	± 70.71	350,000 sf of Retail
Planning Area 1 - Residential	15 dwelling units/acre		Approx. 250 dwelling units
Planning Area 2	21 dwelling units/acre	± 13.11	Approx. 196 dwelling units
Planning Area 3	21 dwelling units/acre	± 4.00	Approx. 84 dwelling units
Totals		± 87.82	350,000 sf of Retail plus 530 dwelling units

Although Table 4 identifies the maximum buildout potential for the proposed land use designations, Alternative 2, as indicated for Planning Area 1 on the site plan (Figure 4), includes the development of 70.71 acres. This EIR will analyze the development of Alternative 2 in Planning Area 1 plus the potential 10,000 square feet of retail on the Gilbert Parcel, and the 4,000 square feet of office and 12,000 square feet of limited industrial on the Ardave Parcel.

Prezoning of Mixed-Use Site

The Mixed-Use Site would be rezoned to the designations listed below in Table 5 for the Base Project, Table 6 for Alternative 1, and Table 7 for Alternative 2, pursuant to City Code Chapter 18.74:

Table 5 Planning Area Acreage and Prezoning for Mixed-Use Site Base Project		
Planning Area	Site Area (acres)	Prezoning
1	± 70.71	General Commercial (CG) with Planned Unit Development (PUD) Overlay
2	± 13.11	High Density Residential (R-H) with PUD Overlay
3	± 4.00	High Density Residential (R-H) with PUD Overlay
Total	± 87.82	

Table 6 Planning Area Acreage and Prezoning for Mixed-Use Site Alternative 1		
Planning Area	Site Area (acres)	Prezoning
1	± 70.71	General Commercial (CG) and Medium Density Residential (R-M) with Planned Unit Development (PUD) Overlay
2	± 13.11	High Density Residential (R-H) with PUD Overlay
3	± 4.00	High Density Residential (R-H) with PUD Overlay
Total	± 87.82	

Table 7 Planning Area Acreage and Prezoning for Mixed-Use Site Alternative 2		
Planning Area	Site Area (acres)	Prezoning
1	± 70.71	General Commercial (CG) and Medium Density Residential (R-M) with Planned Unit Development (PUD) Overlay
2	± 13.11	High Density Residential (R-H) with PUD Overlay
3	± 4.00	High Density Residential (R-H) with PUD Overlay
Total	± 87.82	

As shown in Tables 5 through 7, above, Planning Areas 1, 2 and 3 would be rezoned with a Planned Unit Development (PUD) overlay, including the approval of a Preliminary Development Plan (PDP) for the PUD, prepared pursuant to City Code Chapter 18.63. The PDP would define the

scope of specific permitted and conditional uses, as well as development standards such as setbacks, parking, landscaping and architectural guidelines, for the Mixed-Use Site. The PDP (in conjunction with the Development Agreement, discussed below) would also outline the process for future review and approval of specific development proposals for the Mixed-Use Site. One or more Precise Development Plans would also be approved as part of the project.

Tentative Subdivision Map for Planning Areas 1, 2, and 3 (Base Project)

Planning Area 1 would be subdivided to create 18 parcels for development and 1 parcel for a detention pond. The tentative map also includes one parcel with 275 residential units for Planning Area 2 and one parcel with 84 residential units for Planning Area 3. The map shows the location of retail and commercial building pads as well as the proposed circulation systems for the residential and commercial areas. The tentative map indicates that five access points are proposed along Pennsylvania Avenue for the commercial area, with the main access point located north of the proposed detention pond. The project site plan also details an internal roadway network within the commercial site. This roadway network includes a major east-west roadway as well as a major roadway which connects to Pennsylvania Avenue. Two access points on Cordelia Road are indicated for Planning Area 2 and one access point on Pennsylvania Avenue is indicated for Planning Area 3.

General Plan Amendment and Rezoning of Other Portions of the Project Site

General Plan Amendment to Redesignate the Ardave Parcel, Gilbert Parcel, and Planning Area 4

The land use map in the City's General Plan would be amended to accommodate the project, pursuant to City Code Chapter 17.56. Because all portions of the Ardave Parcel, Gilbert Parcel and Planning Area 4 are located either within Suisun City or the Suisun City Sphere of Influence, General Plan land use designations already have been assigned to all of the applicable property by Suisun City.⁴ Suisun City currently designates all of that property as Limited Industrial / Business Park, except for an area bordering Pennsylvania Avenue at the northern end of the site (including a portion of the Gilbert Parcel), which is designated General Commercial. The Suisun City General Plan is therefore proposed to be amended to include General Commercial and medium and high-density residential.⁵

The portion of the Gilbert Parcel that is designated Limited Industrial / Business Park would be redesignated to General Commercial, resulting in the redesignation of the entire parcel to General Commercial. Planning Area 4 (not part of the Mixed-Use Site) would be redesignated from Limited Industrial / Business Park and General Commercial to Agriculture / Open Space.

Rezoning and Prezoning of Ardave Parcel, Gilbert Parcel and Planning Area 4

The Ardave Parcel, Gilbert Parcel and Planning Area 4 would be rezoned or prezoned (as

⁴ In addition, because the Annexation Property is currently within Solano County, the County has assigned the "Intensive Agricultural" land use designation to the Gilbert Parcel and the portion of Planning Area 4 that is not already within the boundaries of the City of Suisun City, and has assigned the "Extensive Agricultural" land use designation to the Ardave Parcel.

⁵ Note that the Ardave Parcel would remain designated Limited Industrial / Business Park.

applicable) to the designations listed below in Table 8, pursuant to City Code Chapter 18.74.

Table 8 Acreage and Rezoning / Prezoning for Ardave Parcel, Gilbert Parcel and Planning Area 4		
Parcel(s)	Site Area (acres)	Prezoning
Ardave Parcel	± 0.58	M-L (Light Manufacturing)
Gilbert Parcel	± 5.00	CG (General Commercial)
Planning Area 4	± 69.28	A (Agriculture)
Total	± 74.86	

Planned Unit Development Guidelines

The applicant has provided design guidelines to the City for the residential and commercial portions of the project. The residential design guidelines contain details including but not limited to proposed landscaping, building materials and colors, and roof elevations. The commercial component of the PUD Guidelines include standards for exterior building design, landscaping, screening, parking lots, signage, circulation, and exterior lighting.

Development Agreement

The City and the developer may enter into a Development Agreement regarding the Mixed-Use Development component of the project, pursuant to City Code Chapter 18.62.

VII. ENVIRONMENTAL CHECKLIST

The following Checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. Included in each discussion are project-specific mitigation measures recommended as appropriate as part of the Proposed Project.

For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Potentially Significant With Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

Issues	Potentially Significant Impact	Potentially Significant Without Mitigation Incorporated	Less-Than-Significant Impact	No Impact
I. AESTHETICS.				
<i>Would the project:</i>				
a. Have a substantial adverse effect on a scenic vista?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion (Base Project, Alternative 1, and Alternative 2)

- a. The City of Suisun City General Plan (1992) designates the area south of the project site as the Suisun Marsh Management Area. The approximately 87.82 acre mixed-use site is not located within the designated Suisun Marsh Management Area. Although the portion of the project site planned for development is not designated as a scenic vista, the proposed mixed-use development site could impact scenic resources. In addition, development of the mixed-use site could damage scenic resources associated with the Suisun Marsh and could substantially degrade the existing visual character and quality of the site and surroundings. Furthermore, the mixed-use site would introduce new sources of light and glare as part of the proposed project. Therefore, the project would have a *potentially significant* impact.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact	
II. AGRICULTURE RESOURCES.					
<i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1977) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:</i>					
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping Program of the California Resources Agency, to non-agricultural use?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion (Base Project, Alternative 1, and Alternative 2)

a,c. The project site consists of approximately 171.50 acres of vacant land that has historically been used for agriculture, cattle grazing, and hay production. The portion of the project site proposed for development consists of approximately 87.82 acres. Depending on information regarding the nature of the soils on the site and the site’s long term prospects for economically viable agriculture, the conversion of approximately 87.82 acres of farmland could result in a ***potentially significant*** impact.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

b. The project site is not under Williamson Act contract; however, the site is currently zoned for agricultural use (A-40) by the Solano County Zoning Ordinance. As the proposed project involves a request to prezone the site to enable urban development on the majority of the project site, the project could have ***potentially significant*** impacts associated with conflicts to existing zoning for agricultural use.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact	
III. AIR QUALITY.					
<i>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:</i>					
a.	Conflict with or obstruct implementation of the applicable air quality plan?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Expose sensitive receptors to substantial pollutant concentrations?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘

Discussion (Base Project, Alternative 1, and Alternative 2)

a,c. According to the City of Suisun City General Plan, Open Space and Conservation Element (Pg. 80), “Air pollution within the Central Solano County planning area is more a function of occurrences and activities outside of the planning area than within.” The City of Suisun City is located within the San Francisco Bay Air Basin, which is dominated by the strength and position of a semi-permanent, high-pressure center over the Pacific Ocean. Central Solano County, which includes Suisun City, is frequently exposed to strong and persistent prevailing westerly and southwesterly winds, and the level terrain provides little protection.

These winds typically transport airborne pollutants east from the San Francisco Bay Area into Central Solano County. Air quality within the region is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). Under State law, each Air Quality Management District is responsible for producing and implementing a revised air quality attainment plan every three years. The BAAQMD is currently in the process of revising its 2000 Clean Air Plan; however, Year 2000 to 2003 data from the nearest BAAQMD air quality monitoring stations to the project site (Fairfield and Vallejo) indicate that the project area is in violation (“nonattainment”) of State air quality standards for two criteria pollutants, ozone and PM₁₀, and in nonattainment of the federal standard for PM_{2.5}.

The proposed project would result in increased vehicle trips in the Suisun City area, which would generate increased amounts of ozone precursors (NO_x and ROG) and carbon monoxide (CO) that could exceed District thresholds and conflict with applicable air quality plans. In addition, the construction phase of the project would involve grading and excavation activities that would generate particulate matter (PM₁₀), which could exceed District thresholds. Furthermore, construction of the proposed project has the potential to release increased levels of airborne contaminants, which could violate air quality standards and expose sensitive receptors to elevated pollutant concentrations. Therefore, the proposed project would have a ***potentially significant*** impact on air quality by conflicting with applicable thresholds and plans.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

- e. The project would not include industrial or intensive agricultural uses, which are commonly associated with the potential for offensive odors. The project includes residential, general commercial (such as retail), and business park land uses. None of these land uses are commonly associated with the creation of offensive odors. Therefore, the project would have ***no impact*** as regards the generation of odors.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact	
IV. BIOLOGICAL RESOURCES.					
<i>Would the project:</i>					
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion (Base Project, Alternative 1, and Alternative 2)

a-e. The 171.50 acre site primarily consists of nearly level, grazed field dominated by introduced annual grassland. Within the annual grasslands several seasonal wetlands exist, many of which appear to be man-made or enhanced due to the presence of road berms, buried utility line berms, and ditches. A small remnant slough channel is located in the southern portion of the site, which supports willows (*Salix* spp.) and other riparian vegetation. Areas of significant habitat value on the project site include seasonal and perennial marshes, vernal pools, seasonally saturated annual grasslands, riparian wetlands, and drainage channels. In addition, the majority of the project site consists of grazed pastureland, providing limited biological resources for wildlife. Therefore, the impacts associated with the project are ***potentially significant***.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

f. The proposed project area is north of Cordelia Road on the west and east sides of Pennsylvania Avenue. In this local region, Cordelia Avenue defines the northern boundary of the area regulated by the Suisun Marsh Protection Plan. The proposed project is thus located outside (north of) the jurisdictional area of the Suisun Marsh Protection Plan and is not subject to the land use regulations of the Plan. Additionally, the City of Suisun current does not have an adopted Habitat Conservation Plan (HCP).

Therefore, ***no impact*** would occur. However, issues related to potential future habitat conservation plans will be discussed further in the Land use and Biological Resources chapters of the Draft EIR.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
V. CULTURAL RESOURCES.				
<i>Would the project:</i>				
a.		✘		
	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?			
b.		✘		
	Cause a substantial adverse change in the significance of a unique archaeological resource (i.e., an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that the resource contains information needed to answer important scientific research questions, has a special and particular quality such as being the oldest or best available example of its type, or is directly associated with a scientifically recognized important prehistoric or historic event or person)?			
c.		✘		
	Directly or indirectly destroy a unique paleontological resource on site or unique geologic features?			
d.		✘		
	Disturb any human remains, including those interred outside of formal cemeteries.			

Discussion (Base Project, Alternative 1, and Alternative 2)

a-d. A search of the California Historical Resources Information System by the Northwest Information Center (NIC) was conducted specifically for the Gentry-Suisun project (February 2006). The search did not identify historic properties or structures within the proposed project area. However, historic-period archaeological deposits related to the railroad in the project area could be encountered during construction activities. Historic-period resources include stone or adobe fountains or walls, structures and remains with square nails, and refuse deposits or bottle dumps, often located in old wells or privies.

In addition, the NIC did not find recorded Native American or historic-period archeological resources. However, the historic-era resource P-48-000549, the Union Pacific Railroad, is adjacent to the proposed project area, and numerous linear cultural resource studies overlap portions of the site.

Based on an evaluation of the environmental setting and features associated with known sites, Native American cultural resources in this part of Solano County have been found adjacent to wetlands and marshes, near sources of water, including springs, and near valley/upland transition zones. The Gentry-Suisun project area is adjacent to the former tule marshes and wetlands and is bordered by Ledgewood Creek. Given the similarity of these environmental factors, a moderate likelihood exists that unrecorded Native American cultural resources exist in the project area.

According to NIC, prehistoric resources include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat affected rock, or human burials. Therefore, because of the moderate potential for historic and/or prehistoric archaeological resources on the project site, the development of the proposed project would have a *potentially significant* impact.

Mitigation Measure(s)

Implementation of the following mitigation measure(s) would reduce the construction-related impact to a *less-than-significant* level.

V-1. Prior to issuance of grading permits, the contractor shall submit plans to the Public Works Department for review and approval which indicate (via notation on the improvement plans) that if any historical archaeological resources are encountered during site grading or other site work, all such work shall be halted immediately within the area of discovery and the contractor shall immediately notify the Public Works Department of the discovery. In such case, the City shall be required to retain the services of a qualified archaeologist for the purpose of formulating recommendations to the Public Works Director regarding possible strategies for recording, protecting, or curating the discovery as appropriate.

Project personnel shall not collect cultural resources. The archaeologist shall be required to submit to the Public Works Department for review and approval a report of the findings and a recommended method of curation or on-site protection of the resources. No further grading or site work within the area of discovery shall be allowed until the proceeding work has occurred. The Public Works Director shall impose any and all feasible means, considered in light of project design, to avoid any substantial adverse change in the significance of any archaeological find determined to constitute an “historical resource” within the meaning of CEQA Guidelines section 15064.5.

V-2 Prior to the approval of improvement plans, the plans shall state that during construction, if bone is uncovered that may be human; the Native American Heritage Commission in Sacramento and the Solano County Coroner shall be notified. Should human remains be found, the Coroner’s office shall be immediately contacted and all work halted until final disposition by the Coroner. Should the remains be determined to be of Native American descent, the Native American Heritage Commission shall be consulted to determine the appropriate disposition of such remains. The project proponent shall consider any recommendations resulting from such consultation to the extent required by CEQA Guidelines section 15064.5, subdivision (e) and the statutory provisions on which it is based.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VI. GEOLOGY AND SOILS.				
<i>Would the project:</i>				
a.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			
i.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	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 based on other substantial evidence of a known fault?			
ii.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Strong seismic ground shaking?			
iii.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Seismic-related ground failure, including liquefaction?			
iv.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Landslides?			
b.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Result in substantial soil erosion or the loss of topsoil?			
c.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			
d.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code?			
e.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?			

Discussion (Base Project, Alternative 1, and Alternative 2)

ai-iii,c. The general project area is within the Coast Ranges geomorphic province and is underlain primarily with Quaternary Bay mud and marshland deposits. These materials consist of stratified, unconsolidated organic-rich silt and clay which contain local peat, sand, and gravel. Bay mud varies in depth from two to 30 feet. This mud is in turn underlain with alluvial deposits which are as much as 100 feet deep. According to the Solano County Soil Survey, the proposed project site is made up of the following soil: Sycamore silty clay loam, saline (St), Pescadero clay loam (Pc), Alviso silty clay loam (An), and Joice muck (Ja).

The proposed project area is located at the northeastern fringe of the seismically active San Francisco Bay region. Within a 20-mile radius, the area could be affected by Quaternary fault displacements which have moved within the past two million years, including the Green Valley fault at Cordelia, five miles to the west, and the Rodgers Creek fault 20 miles to the west. The Lagoon Valley fault, approximately two miles to the north, and a concealed fault trace in the vicinity of Cement Hill, are considered to be inactive. However, all three of these faults must be considered as potentially active, as the Green Valley fault has been active recently. Studies by the U.S. Geological Survey indicate that this fault is capable of producing moderate earthquakes at a level of 6.6 on the Richter scale. In October 1969, the Rodgers fault produced an earthquake with a Richter magnitude of 5.7.

Moderate and severe earthquakes from one of the surrounding faults could cause severe ground shaking and liquefaction within the planning area because of the underlying geology. Damage to buildings could, therefore, be considerable without proper structural support. Therefore because the project involves the construction of commercial and residential buildings, the possibility of damage to structures could result in a **potentially significant** impact.

Mitigation Measure(s)

Implementation of the following mitigation measure(s) would ensure the impact is *less-than-significant*.

VI-3. *Prior to issuance of a grading permit, a design-level geotechnical report shall be prepared for the proposed project for the review of the Public Works Director. All grading and foundation plans for the development designed by the project Civil and Structural Engineer must be in accordance with the 2001 California Building Code, and reviewed and approved by the Public Works Director and Chief Building Official prior to issuance of building permits to ensure that all geotechnical recommendations specified in the geotechnical report are properly incorporated and utilized in design.*

- b. The project site is primarily vacant with grassland and marsh areas dispersed throughout. The proposed project would result in the construction of a mixed-use development. As part of the proposed project, importation of fill material would be required. The importation and grading of fill, as well as excavation activities could result in erosion due to wind and water effects on exposed soil. The erosion of exposed soil could result in the degradation of downstream water quality. Therefore, because construction activities could generate erosion impacts, the proposed project would result in a **potentially significant** impact.

Mitigation Measure(s)

Implementation of the following mitigation measure(s) would ensure the impact is *less-than-significant*.

VI-4. *Prior to issuance of a building permit, the project developer shall submit, for the review and approval of the Public Works Director, an erosion control plan that*

will utilize standard construction practices to limit the erosion effects during construction of the proposed project. Measures could include, but are not limited to:

- *Hydro-seeding;*
- *Placement of erosion control measures within drainageways and ahead of drop inlets;*
- *The temporary lining (during construction activities) of drop inlets with “filter fabric” (a specific type of geotextile fabric);*
- *The placement of straw wattles along slope contours;*
- *Directing subcontractors to a single designation “wash-out” location (as opposed to allowing them to wash-out in any location they desire);*
- *The use of siltation fences; and*
- *The use of sediment basins and dust palliatives.*

VI-5. No grading, soil disturbance, or compaction shall occur during periods of rain or on ground which contains free water. Soil which has been soaked and wetted by rain or any other cause shall not be compacted until completely drained and until the moisture content is within the limits approved by the Public Works Director. Approval by the Public Works Director shall be obtained prior to continuing grading operations.

- d. The project area is within the Coast Ranges geomorphic province, and according to the General Plan, the proposed project area is underlain primarily with Quaternary Bay mud and marshland deposits. These materials consist of stratified, unconsolidated organic-rich silt and clay, which contain local peat, sand, and gravel. Bay mud varies in depth from two to 30 feet. This mud is in turn underlain with alluvial deposits that are as much as 100 feet deep. Because the proposed project consists of the development of commercial and residential structures on alluvial soils, which are likely to have expansive soil properties, the proposed project would result in a ***potentially significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measure(s) would ensure the impact is *less-than-significant*.

VI-6. Implement Mitigation Measure VI-3.

- e. The project has been designed to connect to existing sewer systems. Therefore, ***no impact*** would occur related to soils incapable of adequately supporting the use of septic tanks.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VII. HAZARDS AND HAZARDOUS MATERIALS.				
<i>Would the project:</i>				
a.			✘	
b.		✘		
c.				✘
d.				✘
e.				✘
f.				✘
g.				✘
h.				✘

Discussion (Base Project, Alternative 1, and Alternative 2)

- a. The proposed project consists of commercial and residential development, which would not involve the routine use, transport, or disposal of hazardous materials. Existing laws prohibit the use of many hazardous household and commercial materials to prevent urban pollution. Therefore, the project would cause *less-than-significant* impacts to the area by hazardous materials.

- a. On February 21, 2006, Raney Planning & Management, Inc. conducted a site visit. During the site visit, signs were observed stating that the site contained buried petroleum, natural gas, underground cable, and sewage force main pipelines. The presence of said underground hazards could potentially cause an impact if the lines are damaged during construction activities. In addition, power lines were observed traversing the northern portion of the site in a southwesterly to northeasterly direction. However, as delineated on the proposed project site plans, a “no build area” would be maintained within the PG&E easement. Proposed project buildings are not present within the “no build area.”

The project site consists of approximately 171.50 acres of vacant land that has historically been used for agriculture, cattle grazing, and hay production. Because it is not known whether pesticides were used on the project site, pesticides could potentially exist on-site. In addition, wells and fuel storage tanks may have been used in the past.

Therefore, should the locations of the above underground hazards not be delineated prior to construction of the proposed project and a study of project site soils for pesticides not be completed, a *potentially significant* impact would occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impacts to a *less-than-significant* level.

VII-7. *Prior to construction, representatives from the fuel line operators and a representative from the City’s Public Works Department shall meet on the project site and prepare site-specific safety guidelines for construction in the field to the satisfaction of the Public Works Director. These guidelines shall include provisions relating to the identification and protection of existing gas and petroleum pipelines on the project site. The safety guidelines shall be noted on the improvement plans and be included in all construction contracts involving the project site.*

VII-8. *During construction, an on-site safety manager shall be designated to address any discovered release or accidental rupture of the pipeline(s), which might occur during construction. The on-site safety manager shall obtain and keep in a readily available location the emergency response plans of fuel line operators and the appropriate contact phone numbers for emergencies. This requirement shall be noted on the improvement plans and be included in all construction contracts for the review and approval of the Public Works Director.*

- VII-9. *Prior to construction, the City shall coordinate with PG&E to ensure that service from the pipelines within the project area is not affected.*
- VII-10. *During construction of diversion pipes for the affected utilities, the project contractor shall apply Public Utilities Commission General Order 112-E.*
- VII-11. *Prior to the construction, the project contractor shall coordinate with the Public Works Director in establishing a utilities relocation plan, which shall include methods to ensure the provision of utilities during construction of the project.*
- VII-12. *Prior to the issuance of grading permits, the Applicant shall have a Phase I Environmental Site Assessment conducted by a qualified soils engineer for the Gentry-Suisun project site. Additional recommendations included in the Phase I and not addressed in Mitigation Measures VII-7 to VII-11 shall be incorporated into the project.*
- c. Crystal Middle School is the nearest school, located approximately 0.5 miles east of the project site in the City of Suisun City. A school is not anticipated to be constructed or located within one-quarter mile of the project site, and Crystal Middle School is located further than one-quarter mile of the project site. Therefore, ***no impact*** would occur.
- d. According to the Department of Toxic Substances Control (DTSC), Facility Inventory Data Base Hazardous Waste and Substances Sites List, the proposed project site is not listed as a hazardous materials site. Therefore, ***no impact*** would occur.
- e-f. The project site is not within an airport land use plan or within two miles of an airport. Therefore, ***no impact*** would occur.
- g. Development of the project site would not interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, ***no impact*** would occur. Issues related to traffic conditions related to the addition of emergency service providers will be discussed in detail in the traffic and circulation section of the Draft EIR.
- h. The site is not located within an area where wildland fires occur. According to the General Plan (Pg. 109), “The risk of wildfire is low in Suisun city as natural habitats within or bordering the City are not characterized by the type of heavy brush or wooded vegetation that constitute a severe fire hazard.” However, the site is covered in natural vegetation, sections of which have the potential to become dry in the summer months, creating the risk of wildland fires on the project site. The development of the proposed project would include the removal of this vegetation and would reduce the chances of wildland fires on the project site. Therefore, ***no impact*** would occur.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY.				
<i>Would the project:</i>				
a. Violate any water quality standards or waste discharge requirements?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Place within a 100-year floodplain structures which would impede or redirect flood flows?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion (Base Project, Alternative 1, and Alternative 2)

- a,c-i. The proposed project consists of the subdivision and development of a mixed-use project on approximately 87.82 currently vacant acres. The proposed project would create impervious surfaces where none currently exist, which would increase stormwater peak flows. The increased runoff volume could impact the local drainage system. In addition, the entire site is within the 100-year floodplain.

During construction of the proposed project, a potential exists to impact the water quality of jurisdictional waters. In addition, because of hydrocarbons and other pollutants associated with commercial land uses (e.g., parking lot areas), operational stormwater discharges have the potential to impact water quality. Therefore, the proposed project would have a *potentially significant* impact.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

- b. The proposed project would create impervious surfaces where few currently exist. The stormwater that currently percolates into the site's soils and becomes subsurface flow would be discharged into Ledge Creek and then join the bay to the south. In addition, because of the proposed project's proximity to sea level, the local recharge rate is expected to be high. Furthermore, the City of Suisun City does not rely on groundwater for water supply. The total project area includes 497.61 acres. This area includes 321 acres located to the south of the proposed project site and approximately 84 acres to the east of the proposed project, which would remain undeveloped open space, and groundwater operations, including recharge and drainage patterns, would remain unchanged. Therefore, any reduction in groundwater level would not adversely affect the area surrounding the proposed project resulting in a *less-than-significant* impact.
- j. Tsunamis are defined as sea waves created by undersea fault movement. A tsunami poses little danger away from shorelines; however, when it reaches the shoreline, a high swell of water breaks and washes inland with great force. Waves may reach fifty feet in height on unprotected coasts. Historic records of the Bay Area used by one study indicate that nineteen tsunamis were recorded in San Francisco Bay during the period of 1868-1968. Maximum wave height recorded at the Golden Gate tide gauge, where wave heights peak, was 7.4 feet. The available data indicate a standard decrease of original wave height from the Golden Gate to about half original wave height on the shoreline near Richmond, and to nil at the head of the Carquinez Strait. The proposed project is several miles inland from the Carquinez Strait. Furthermore, in the event of an unexpected emergency associated with a tsunami, the City would implement its standard procedures for emergency/disaster events in order to ensure a highly organized and efficient safety management effort.

A seiche is a long wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir, whose destructive capacity is not as great as that of tsunamis. Seiches are known to have occurred during earthquakes, but none have been recorded in the Bay Area. Furthermore, the project is not located near such a body of water. Therefore, it is not anticipated that the project site would be inundated by seiches in the future.

Because mudflows typically occur in mountainous or hilly terrain, and the project site and surrounding areas are relatively flat, the risk of impacts from mudflows would be negligible.

The above analysis indicates that the project site would not be expected to be threatened by a seiche, tsunami, or mudflow; therefore, *less-than-significant* impacts from such phenomena would occur.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than- Significant Impact	No Impact
IX. LAND USE AND PLANNING.				
<i>Would the project:</i>				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with any applicable land use plans, policies, or regulations 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 on environmental effect?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural communities conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion (Base Project, Alternative 1, and Alternative 2)

a. Although the project site is outside the City limits, the site is within the City’s Sphere of Influence and has been assigned Suisun City General Plan land use designations. According to the General Plan, existing land use designations for the project site include General Commercial, Limited Industrial/Business Park. The project involves the construction of an 88.4 acre mixed-use development. The project site is surrounded by the following commercial and residential uses:

- To the west of the project is Ledgewood Creek which is designated as conservation land and vacant land beyond the Ledgewood Creek buffer.
- To the south of the project site is agricultural land used for cattle grazing.
- To the east of the project site lie the UPRR tracks and residential and commercial development.
- To the north of the project site is SR 12 with low to medium and high density residential, service commercial, and mixed-use.
- In the central portion of the project site are two parcels used for commercial services (automotive repair and industrial concrete services).

Therefore, the proposed project would not divide an established community, resulting in a ***less-than-significant*** impact.

b. The proposed project would require a General Plan amendment to include the proposed residential uses on the site. Furthermore, the project could result in incompatibilities with surrounding land uses such as the residences adjacent to agricultural uses, and other land use policies governing this portion of the City of Suisun City. Therefore, the impact would be considered ***potentially significant***.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

- c. The project site is not located within a designated General Plan open space or conservation area, and does not fall within the Suisun Marsh Preservation Plan. Additionally, the City of Suisun current does not have an adopted Habitat Conservation Plan (HCP). Therefore, ***no impact*** would occur. However, issues related to potential future habitat conservation plans will be discussed further in the Land use and Biological Resources chapters of the Draft EIR.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
X. MINERAL RESOURCES.				
<i>Would the project:</i>				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion (Base Project, Alternative 1, and Alternative 2)

a,b. The Suisun City General Plan does not provide detailed information regarding mineral resources. As a result, it is not possible to identify if the project site is located within an oil or gas field where potential oil and gas reserves exist, or where mineral deposits exist. However, because new mining technology can access mineral resources from off-site locations, the proposed project would not prohibit access to mineral resources located on the project site. Therefore, the proposed project would result in a *less-than-significant* impact to mineral resources.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XI. NOISE.				
<i>Would the project result in:</i>				
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?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘

Discussion (Base Project, Alternative 1, and Alternative 2)

a-d. The proposed project includes the construction of commercial uses adjacent to residential uses, which could create incompatibilities. In addition, Pennsylvania Avenue and Cordelia Road are located adjacent to proposed residential areas. Traffic along these roadways could result in noise exposure at the residential areas in exceedance of City standards. The railroad that bisects the project site would also potentially impact adjacent proposed residential uses. In addition, the construction of the proposed project would create a temporary increase in project-related noise impacts. Therefore, development of the proposed project would result in a *potentially significant* impact.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

- e.f. The project site is not located within two miles of an existing airport and is not located within any existing airport land use plans. Though Travis Air Force Base is located nearby to the east of the City of Suisun, the project site is outside of the area designated in the Airport Land Use Plan for Travis Air Force Base. Therefore, ***no impact*** would occur.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XII. POPULATION AND HOUSING.				
<i>Would the project:</i>				
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘

Discussion (Base Project, Alternative 1, and Alternative 2)

a. The proposed project would include between 359 and 530 medium-high residential units, depending upon whether the Base Project, Alternative 1, or Alternative 2 is implemented. The development of up to 530 residential units would directly increase population in the area. Furthermore, as the site is designated for non-residential development, the increase in population associated with the project was not previously anticipated in the Suisun City General Plan. Therefore, the development of the proposed project would result in a ***potentially significant*** impact.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

b,c The proposed project would not displace any residents. Therefore, the project would not displace a substantial number of homes requiring the construction of replacement housing elsewhere, resulting in ***no impact***.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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XIII. PUBLIC SERVICES.

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public works:

a. Fire protection?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Police protection?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Schools?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Parks?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion (Base Project, Alternative 1, and Alternative 2)

a-d. The proposed project would be located within the jurisdiction of the City of Suisun Police Department and the Suisun Volunteer Fire Department. The demand for fire and police services and the need for additional personnel would be increased as a result of the project, which involves the construction of an 87.82 acre mixed-use project.

The residential areas of the project would result in increased enrollment in existing schools within the Fairfield-Suisun School District. The project does not involve the construction of new school facilities. The addition of students from the project could degrade existing school facilities or require the construction of new schools elsewhere.

The residential areas proposed would also increase the number of individuals using existing park and recreational facilities. The project would include dedication of park acreage for the residential areas. However, in the event that the acreage dedicated is not consistent with City standards, adverse impacts would result.

Because the project would increase the demand on police, fire, school, and park facilities, a ***potentially significant*** impact would result.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIV. RECREATION.				
<i>Would the project:</i>				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion (Base Project, Alternative 1, and Alternative 2)

a,b. The proposed project involves the construction of commercial and residential land uses on approximately 87.82 acres. The residential areas would increase the number of individuals using existing park and recreational facilities. The project would include dedication of park acreage for the residential areas. In the event that the acreage dedicated is not consistent with City standards, a *potentially significant* impact would result.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XV. TRANSPORTATION/CIRCULATION.				
<i>Would the project:</i>				
a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
d. Substantially increase hazards due to a design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
e. Result in inadequate emergency access?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Result in inadequate parking capacity?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion (Base Project, Alternative 1, and Alternative 2)

a,b,e-g. The proposed project would develop commercial and residential uses on approximately 87.82 acres. The commercial complex would result in an increase in the number of visitors to the City of Suisun City. The residential development would increase the number of trips generated from the site. Both the visitors to the City and the existing residents of the City using the commercial complex would result in an increase in traffic in the project site vicinity. Therefore, implementation of the proposed project would result in a ***potentially significant*** impact to increased traffic volumes, which could impact intersection levels of service, emergency access, parking capacity, or conflict with adopted policies supporting alternative transportation.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

- c. The proposed project does not require any changes to existing regional air traffic activity. In addition, the project site is located at a distance of approximately 6 miles from Travis Air Force Base. Therefore, ***no impact*** would occur.

- d. The proposed project would be designed to City standards and thus would not include any unusual design features in the layout of the streets that would increase hazards. Therefore, a ***less-than-significant*** impact would result from the buildout of the proposed development.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVI. UTILITIES AND SERVICE SYSTEMS.				
<i>Would the project:</i>				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion (Base Project, Alternative 1, and Alternative 2)

a-g. The proposed project site is located within the Suisun-Solano Water Authority (SSWA) which manages water supply and distribution to the City. The SSWA is a joint powers authority between the City of Suisun City and the Solano Irrigation District under an implementation agreement entered into in 1990. Both Suisun City and Solano Irrigation District have contracted with the Solano County Water Agency for water supplies from the federal Solano Project. The proposed project would construct commercial and residential

uses on approximately 87.82 acres. Both the commercial and residential uses would increase the demand for water supply at the project site.

The Fairfield-Suisun Subregional Wastewater Treatment Plant (WWTP) provides tertiary treatment of wastewater generated from domestic, commercial, and industrial sources within the City boundaries of Fairfield and Suisun City. This WWTP would be expected to serve the needs of the project. However, the possibility exists that because the residential development proposed for the project was not anticipated in the Suisun City General Plan for the project site, adequate capacity does not exist to serve all of the land uses proposed for the project.

Suisun City's solid waste is hauled to the Potrero Hills Landfill (PHL), owned and operated by Republic Services, Inc. PHL's current service area encompasses portions of the Bay Area, Central Valley, Sierra foothills, and north coast of California, within an approximately 150-mile radius. PHL accepts wastes from a variety of communities and transfer facilities located throughout northern California, including the Sierra foothill counties and Alameda, Contra Costa, Marin, Mendocino, Napa, Sacramento, Santa Clara, San Mateo, Solano, and Yolo Counties. The increased amount of solid waste generated from the commercial and residential uses proposed for the project could result in adverse effects to the landfill's available capacity.

As a result, the proposed project could have *potentially significant* impacts to water supply, wastewater, and solid waste disposal.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

Issues	Potentially Significant Impact	Potentially Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XII. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially 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?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	✘	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion (Base Project, Alternative 1, and Alternative 2)

a,b. The proposed project consists of the development of commercial and residential uses on approximately 87.82 acres, resulting in the conversion of portions of the project site from vacant to urban. The conversion could interfere with habitats on the project site and could potentially harm special-status plant and/or animal species. Furthermore, project-associated excavation and grading activities could potentially disturb currently unknown archeological resources on the site. Such impacts may also be considered to achieve short-term, to the disadvantage of long-term environmental goals. Therefore, the impact would be considered ***potentially significant***.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

- c,d. As part of the greater San Francisco Bay Area, the City of Suisun City is experiencing more urban growth than in previous years. When taken in combination with impacts elsewhere in the project region, the impacts associated with the proposed project could result in individually limited, but cumulatively considerable, adverse effects on the environment, including increased demand for services and resources, and physical changes to the natural environment. These impacts could result in adverse effects on human beings. Therefore, the impacts would be considered *potentially significant*.

Mitigation Measure(s)

Further analysis of this impact will be included in the Gentry-Suisun EIR.

**AIR QUALITY IMPACT EVALUATION FOR GENTRY/SUISUN
ANNEXATION PROJECT, SUISUN CITY**

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February 2006

I. Introduction

This report provides an air quality impact assessment of the proposed Gentry/Suisun Annexation Project, which involves the annexation of 172.5 acres of land from Solano County into the City of Suisun City. This report is intended to meet the requirements of the Bay Area Air Quality Management District's guidance for environmental documents.¹ It addresses existing air quality conditions, the impacts of the project during construction, and permanent local and regional air quality impacts. Where significant air quality impacts are identified, mitigation measures are described that would reduce or eliminate the impact.

II. Existing Setting

Air Pollution Climatology

Suisun City is located between the San Francisco Bay and the Sacramento Valley and is within the San Francisco Bay Air Basin. Suisun City has a relatively low potential for air pollution given the persistent and strong winds typical of the area. Wind records from the closest wind-measuring sites show a strong predominance of southwesterly winds. Average wind speed is relatively high and the frequency of calm winds is quite low.² These winds dilute pollutants and transport them away from the area, so that emissions released in the project area have more influence on air quality in the Sacramento and San Joaquin valleys than they do locally. However, project's location downwind of the greater Bay Area means that pollutants from other areas are transported to the area.

Air Pollutants and Ambient Air Quality Standards

Criteria Pollutants

Both the U. S. Environmental Protection Agency and the California Air Resources Board have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants which represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. . The federal and California state ambient air quality standards are summarized in Table 1.

¹Bay Area Air Quality Management District, BAAQMD CEQA Guidelines, 1996 (Revised 1999).

²California Department of Water Resources, Wind in California, Bulletin No. 185, January 1978.

Table 1: Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standard	State Standard
Ozone	1-Hour	0.12 PPM	0.09 PPM
	8-Hour	0.08 PPM	0.07 PPM
Carbon Monoxide	8-Hour	9.0 PPM	9.0 PPM
	1-Hour	35.0 PPM	20.0 PPM
Nitrogen Dioxide	Annual Average	0.05 PPM	--
	1-Hour	--	0.25 PPM
Sulfur Dioxide	Annual Average	0.03 PPM	--
	24-Hour	0.14 PPM	0.05 PPM
	1-Hour	--	0.25 PPM
PM ₁₀	Annual Average	50 µg/m ³	20 µg/m ³
	24-Hour	150 µg/m ³	50 µg/m ³
PM _{2.5}	Annual	15 µg/m ³	12 µg/m ³
	24-Hour	65 µg/m ³	--
Lead	Calendar Quarter	1.5 µg/m ³	--
	30 Day Average	--	1.5 µg/m ³
Sulfates	24 Hour	25 µg/m ³	--
Hydrogen Sulfide	1-Hour	0.03 PPM	--
Vinyl Chloride	24-Hour	0.01 PPM	--

PPM = Parts per Million

µg/m³ = Micrograms per Cubic Meter

Source: California Air Resources Board, Ambient Air Quality Standards (5/6/05)

<http://www.arb.ca.gov/aqs/aqs2.pdf>

The federal and state ambient standards were developed independently with differing purposes and methods, although both processes attempted to avoid health-related effects. As a result, the federal and state standards differ in some cases. In general, the California state standards are more stringent. This is particularly true for ozone and particulate matter (PM₁₀ and PM_{2.5}).

In 1997 new national standards for fine Particulate Matter (diameter 2.5 microns or less) were adopted for 24-hour and annual averaging periods. The current PM₁₀ standards were to be retained, but the method and form for determining compliance with the standards were revised.

The State of California regularly reviews scientific literature regarding the health effects and exposure to PM and other pollutants. On May 3, 2002, the California Air Resources Board (CARB) staff recommended lowering the level of the annual standard for PM₁₀ and establishing a new annual standard for PM_{2.5} (particulate matter 2.5 micrometers in diameter and smaller). The new standards became effective on July 5, 2003.

On April 28, 2005 the California Air Resources Board established a new 8-hour standard for ozone (0.07 PPM), expected to become effective in early 2006.

Toxic Air Contaminants

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

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

Attainment Status and Regional Air Quality Plans

The federal Clean Air Act and the California Clean Air Act of 1988 require that the State Air Resources Board, based on air quality monitoring data, designate portions of the state where the federal or state ambient air quality standards are not met as "nonattainment areas". Because of the differences between the national and state standards, the designation of nonattainment areas is different under the federal and state legislation.

The Bay Area is currently a nonattainment for 1-hour ozone standard. However, in April 2004, U.S. EPA made a final finding that the Bay Area has attained the national 1-hour ozone standard. The finding of attainment does not mean the Bay Area has been

reclassified as an attainment area for the 1-hour standard. The region must submit a re-designation request to EPA in order to be reclassified as an attainment area.

The U. S. Environmental Protection Agency has classified the San Francisco Bay Area as a nonattainment area for the federal 8-hour ozone standard. The Bay Area was designated as unclassifiable/attainment for the federal PM_{2.5} standards.

Under the California Clean Air Act western Solano County is a nonattainment area for ozone and particulate matter (PM₁₀ and PM_{2.5}). The county is either attainment or unclassified for other pollutants. The California Clean Air Act requires local air pollution control districts to prepare air quality attainment plans. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods or if not, provide for adoption of "all feasible measures on an expeditious schedule".

Current Air Quality

The state and national ambient air quality standards cover a wide variety of pollutants. Only a few of these pollutants are problems in the Bay Area either due to the strength of the emission or the climate of the region. The BAAQMD maintains a network of monitoring sites in the Bay Area. The closest monitoring site to Suisun City is in Fairfield, but only ozone is monitored at that site. The closest multi-pollutant monitoring site is located in Vallejo. Table 2 summarizes violations of air quality standards at these monitoring sites for the period 2002-2004. Table 2 shows that the federal ambient air quality standards are met in the project area with the exception of the standard for PM_{2.5}. State ambient standards are met with the exception of ozone and PM₁₀.

Sensitive Receptors

The Bay Area Air Quality Management District defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, schools playgrounds, child care centers, retirement homes, convalescent homes, hospitals and medical clinics. There are residences north of the project site on the far side of SR 12 and east of Planning Area 4.

Standards of Significance

BAAQMD CEQA Guidelines³ provide the following definitions of a significant air quality impact:

³ Bay Area Air Quality Management District, BAAQMD CEQA Guidelines, 1996 (Revised December 1999).

Table 2. Air Quality Data Summary for Fairfield and Vallejo, 2002-2004

Pollutant	Standard	Days Standard Exceeded During:			
		Station	2002	2003	2004
Ozone	Federal 1-Hour	Fairfield	0	0	0
		Vallejo	0	0	0
Ozone	State 1-Hour	Fairfield	4	0	1
		Vallejo	1	2	1
Ozone	Federal 8-Hour	Fairfield	0	0	0
		Vallejo	0	0	0
PM ₁₀	Federal 24-Hour	Fairfield	-	-	-
		Vallejo	0	0	0
PM ₁₀	State 24-Hour	Fairfield	-	-	-
		Vallejo	2	0	1
PM _{2.5}	Federal 24-Hour	Fairfield	-	-	-
		Vallejo	1	0	0
Carbon Monoxide	State/Federal 8-Hour	Fairfield	-	-	-
		Vallejo	0	0	0
Nitrogen Dioxide	State 1-Hour	Fairfield	-	-	-
		Vallejo	0	0	0

Source: Air Resources Board, Aerometric Data Analysis and Management (ADAM), 2005. (<http://www.arb.ca.gov./adam/cgi-bin/adamtop/d2wstart>)

- A project contributing to carbon monoxide (CO) concentrations exceeding the State Ambient Air Quality Standard of 9 parts per million (ppm) averaged over 8 hours or 20 ppm for 1 hour would be considered to have a significant impact.
- A project that generates criteria air pollutant emissions in excess of the BAAQMD annual or daily thresholds would be considered to have a significant air quality impact. The current thresholds are 15 tons/year or 80 pounds/day for Reactive Organic Gases (ROG), Nitrogen Oxides (NO_x) or PM₁₀. Any proposed project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact.
- Any project with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.
- Any project with the potential to expose sensitive receptors or the general public to substantial levels of toxic air contaminants would be deemed to have a significant impact.

Despite the establishment of both federal and state standards for PM_{2.5} (particulate matter, 2.5 microns), the BAAQMD has not developed a threshold of significance for this pollutant. For this analysis, PM_{2.5} impacts would be considered significant if project emissions of PM₁₀ (which includes PM_{2.5}) exceed 80 pounds per day.

The BAAQMD significance threshold for construction dust impacts is based on the appropriateness of construction dust controls. The BAAQMD guidelines provide feasible control measures for construction emission of PM₁₀. If the appropriate construction controls are to be implemented then air pollutant emissions for construction activities would be considered less-than-significant.

IMPACTS

Impact 1: Construction Dust Emissions. Construction activities such as demolition, clearing, excavation and grading operations, construction vehicle traffic and wind blowing over exposed earth would generate fugitive particulate matter emissions that would temporarily affect local air quality.

Base Project

Dust would affect local air quality during construction of the project. Grading, earthmoving and excavation are the activities that generate the most PM₁₀ emissions. The dry, windy climate of the area during the summer months creates a high potential for dust generation when and if underlying soils are exposed to the atmosphere.

Construction activities would also generate exhaust emissions from vehicles/equipment and fugitive particulate matter emissions that would affect local air quality. Construction

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

According to the *BAAQMD CEQA Guidelines*, emissions of ozone precursors (ROG and NO_x) and carbon monoxide related to construction equipment are already included in the emission inventory that is the basis for regional air quality plans, and thus are not expected to impede attainment or maintenance of ozone and carbon monoxide standards in the Bay Area. Thus, the major effect of construction activities would be increased dustfall and locally elevated levels of particulate matter downwind of construction activity. Construction dust has the potential for creating a nuisance at nearby properties. This is considered a potentially significant impact.

Alternative 1

Dust would affect local air quality during construction of the project. Grading, earthmoving and excavation are the activities that generate the most PM₁₀ emissions. The dry, windy climate of the area during the summer months creates a high potential for dust generation when and if underlying soils are exposed to the atmosphere.

Construction activities would also generate exhaust emissions from vehicles/equipment and fugitive particulate matter emissions that would affect local air quality. Construction activities are also a source of organic gas emissions. Solvents in adhesives, non-waterbase paints, thinners, some insulating materials and caulking materials would evaporate into the atmosphere and would participate in the photochemical reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

According to the *BAAQMD CEQA Guidelines*, emissions of ozone precursors (ROG and NO_x) and carbon monoxide related to construction equipment are already included in the emission inventory that is the basis for regional air quality plans, and thus are not expected to impede attainment or maintenance of ozone and carbon monoxide standards in the Bay Area. Thus, the major effect of construction activities would be increased dustfall and locally elevated levels of particulate matter downwind of construction activity. Construction dust has the potential for creating a nuisance at nearby properties. This is considered a potentially significant impact.

Alternative 2

Dust would affect local air quality during construction of the project. Grading, earthmoving and excavation are the activities that generate the most PM₁₀ emissions. The dry, windy climate of the area during the summer months creates a high potential for dust generation when and if underlying soils are exposed to the atmosphere.

Construction activities would also generate exhaust emissions from vehicles/equipment and fugitive particulate matter emissions that would affect local air quality. Construction activities are also a source of organic gas emissions. Solvents in adhesives, non-waterbase paints, thinners, some insulating materials and caulking materials would evaporate into the atmosphere and would participate in the photochemical reaction that creates urban ozone. Asphalt used in paving is also a source of organic gases for a short time after its application.

According to the *BAAQMD CEQA Guidelines*, emissions of ozone precursors (ROG and NO_x) and carbon monoxide related to construction equipment are already included in the emission inventory that is the basis for regional air quality plans, and thus are not expected to impede attainment or maintenance of ozone and carbon monoxide standards in the Bay Area. Thus, the major effect of construction activities would be increased dustfall and locally elevated levels of particulate matter downwind of construction activity. Construction dust has the potential for creating a nuisance at nearby properties. This is considered a potentially significant impact.

Mitigation Measure 1 for Base Project, Alternative 1 and Alternative 2: Consistent with guidance from the BAAQMD, the following measures shall be required of construction contracts and specifications for the project:

- Water all active construction areas at least twice daily and more often during windy periods; active areas adjacent to existing land uses shall be kept damp at all times, or shall be treated with non-toxic stabilizers or dust palliatives;
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least 2 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 (preferably with water sweepers) all paved access roads, parking areas, and staging areas at construction sites; water sweepers shall vacuum up excess water to avoid runoff-related impacts to water quality;
- Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets;
- Apply non-toxic soil stabilizers to inactive construction areas;
- 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.

The above measures include all feasible measures for construction emissions identified by the Bay Area Air Quality Management District for large sites. According to the District threshold of significance for construction impacts, implementation of the measures would reduce construction impacts to a less-than-significant level.

Impact 2: Construction TAC Emissions. During construction various diesel-powered vehicles and equipment would be in use on the site, potentially exposing sensitive receptors to diesel particulate.

During construction various diesel-powered vehicles and equipment would be in use on the site. In 1998 the California Air Resources Board identified particulate matter from diesel-fueled engines as a toxic air contaminant (TAC). CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines.⁴ High volume freeways, stationary diesel engines and facilities attracting heavy and constant diesel vehicle traffic (distribution centers, truckstop) were identified as having the highest associated risk.

Base Project

Health risks from Toxic Air Contaminants are function of both concentration and duration of exposure. Unlike the above types of sources, construction diesel emissions are temporary, affecting an area for a period of days or perhaps weeks. The major source of diesel exhaust during construction would be earthmoving equipment. Also, there would be roughly 2350 trucks trips bringing imported fill to the site. These emissions would be released prior to occupation of the site and thus would not affect on-site sensitive receptors such as proposed residences. Construction activity would be occurring at a substantial distance from the closest sensitive receptors, which are located roughly 250 feet north of Highway 12. Because of the above considerations, and the short duration of construction, health risks from construction emissions of diesel particulate would be a less-than-significant impact.

Alternative 1

Health risks from Toxic Air Contaminants are function of both concentration and duration of exposure. Unlike the above types of sources, construction diesel emissions are temporary,

⁴ California Air Resources Board, Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, October 2000.

affecting an area for a period of days or perhaps weeks. The major source of diesel exhaust during construction would be earthmoving equipment. Also, there would be roughly 2350 trucks trips bringing imported fill to the site. These emissions would be released prior to occupation of the site and thus would not affect on-site sensitive receptors such as proposed residences. Construction activity would be occurring at a substantial distance from the closest sensitive receptors, which are located roughly 250 feet north of Highway 12. Because of the above considerations, and the short duration of construction, health risks from construction emissions of diesel particulate would be a less-than-significant impact.

Alternative 2

Health risks from Toxic Air Contaminants are function of both concentration and duration of exposure. Unlike the above types of sources, construction diesel emissions are temporary, affecting an area for a period of days or perhaps weeks. The major source of diesel exhaust during construction would be earthmoving equipment. Also, there would be roughly 2350 trucks trips bringing imported fill to the site. These emissions would be released prior to occupation of the site and thus would not affect on-site sensitive receptors such as proposed residences. Construction activity would be occurring at a substantial distance from the closest sensitive receptors, which are located roughly 250 feet north of Highway 12. Because of the above considerations, and the short duration of construction, health risks from construction emissions of diesel particulate would be a less-than-significant impact.

Mitigation Measure 2 for Base Project, Alternative 1 and Alternative 2: None required.

Impact 3: Permanent Local Impacts. Project traffic would add to carbon monoxide concentrations near streets and intersections providing access to the site.

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

The Bay Area Air Quality Management District's *BAAQMD CEQA Guidelines* recommends estimation of carbon monoxide concentrations for projects where project traffic would impact signalized intersections or roadway links operating at Level of Service D, E, or F or would cause Level of Service to decline to D, E, or F.

The traffic study prepared for the project found that five signalized intersections meet the BAAQMD threshold for modeling in the PM peak hour. Carbon monoxide concentrations under worst-case meteorological conditions have been predicted for these intersections. PM peak traffic volumes were applied to the a screening form of the CALINE-4 dispersion

model to predict maximum 1- and 8-hour concentrations near these intersections under the worst-case assumption that project traffic changes would occur in 2006. Appendix 1 provides a description of the model and a discussion of the methodology and assumptions used in the analysis. The model results were used to predict the maximum 1- and 8-hour concentrations, corresponding to the 1- and 8-hour averaging times specified in the state and federal ambient air quality standards for carbon monoxide.

Tables 3-5 show the results of the CALINE-4 analysis for the peak 1-hour and 8-hour traffic periods in parts per million (PPM). The 1-hour values are to be compared to the federal 1-hour standard of 35 PPM and the state standard of 20 PPM. The 8-hour values in Table 3 are to be compared to the state and federal standard of 9 PPM.

Base Project

Table 3 shows that existing predicted concentrations near the intersections meet the 1-hour and 8-hour standards. Traffic from the proposed project would increase concentrations by up to 1.1 PPM, but concentrations would remain below the most stringent state or federal standards. Concentrations with project and cumulative traffic

Table 3: Base Project Worst Case Carbon Monoxide Concentrations Near Selected Intersections, in Parts Per Million

Intersection	Existing (2006)		Existing + Base Project (2006)		Cumulative + Base Project (2030)	
	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr
Texas/ I-80 WB Ramps	6.6	3.9	6.8	4.1	4.2	2.2
Pennsylvania/ SR 12.	9.4	5.9	10.5	6.7	5.3	3.0
Beck/ SR 12	9.0	5.6	9.6	6.0	5.2	2.9
Texas/ Pennsylvania	6.9	4.2	7.3	4.5	4.6	2.5
Texas/ Beck	7.4	4.5	7.6	4.7	4.9	2.7
Most Stringent Standard	20.0	9.0	20.0	9.0	20.0	9.0

growth in 2030 would also not exceed the state/federal ambient air quality standards.

Since project traffic would not cause any new violations of the 8-hour standards for carbon monoxide, nor contribute substantially to an existing or projected violation, project impacts on local carbon monoxide concentrations are considered to be less-than-significant.

Alternative 1

Table 4 shows that existing predicted concentrations near the intersections meet the 1-hour and 8-hour standards. Traffic from the proposed project would increase concentrations by up to 0.8 PPM, but concentrations would remain below the most stringent state or federal standards. Concentrations with project and cumulative traffic growth in 2030 would also not exceed the state/federal ambient air quality standards.

Since project traffic would not cause any new violations of the 8-hour standards for carbon monoxide, nor contribute substantially to an existing or projected violation, project impacts on local carbon monoxide concentrations are considered to be less-than-significant.

Alternative 2

Table 5 shows that existing predicted concentrations near the intersections meet the 1-hour and 8-hour standards. Traffic from the proposed project would increase concentrations by up to 0.7 PPM, but concentrations would remain below the most stringent state or federal standards. Concentrations with project and cumulative traffic growth in 2030 would also not exceed the state/federal ambient air quality standards.

Since project traffic would not cause any new violations of the 8-hour standards for carbon monoxide, nor contribute substantially to an existing or projected violation, project impacts on local carbon monoxide concentrations are considered to be less-than-significant.

Mitigation Measure 3 for Base Project, Alternative 1 and Alternative 2: None required.

Impact 4: Permanent Regional Impacts. Additional trips to and from the project would result in new air pollutant emissions within the air basin.

Base Project

Vehicle trips generated by the Base Project would result in air pollutant emissions affecting the entire San Francisco Bay Air Basin. The Base Project is expected to generate an additional 26,600 new daily vehicle trips. Regional emissions associated with new vehicle trips have been calculated using the URBEMIS2002 emission model. The methodology used in estimating vehicular emissions is described in Appendix 2.

Table 4: Alternative 1 Worst Case Carbon Monoxide Concentrations Near Selected Intersections, in Parts Per Million

Intersection	Existing (2006)		Existing + Alternative 1 (2006)		Cumulative + Alternative 1 (2030)	
	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr
Texas/ I-80 WB Ramps	6.6	3.9	6.7	4.0	4.2	2.2
Pennsylvania/ SR 12.	9.4	5.9	10.2	6.5	5.3	2.9
Beck/ SR 12	9.0	5.6	9.4	5.9	5.1	2.8
Texas/ Pennsylvania	6.9	4.2	7.2	4.4	4.5	2.4
Texas/ Beck	7.4	4.5	7.6	4.6	4.9	2.7
Most Stringent Standard	20.0	9.0	20.0	9.0	20.0	9.0

Table 5: Alternative 2 Worst Case Carbon Monoxide Concentrations Near Selected Intersections, in Parts Per Million

Intersection	Existing (2006)		Existing + Alternative 1 (2006)		Cumulative + Alternative 2 (2030)	
	1-Hr	8-Hr	1-Hr	8-Hr	1-Hr	8-Hr
Texas/ I-80 WB Ramps	6.6	3.9	6.7	4.0	4.2	2.2
Pennsylvania/ SR 12.	9.4	5.9	10.1	6.4	5.2	2.9
Beck/ SR 12	9.0	5.6	9.4	5.9	5.1	2.8
Texas/ Pennsylvania	6.9	4.2	7.2	4.4	4.5	2.4
Texas/ Beck	7.4	4.5	7.5	4.6	4.9	2.7
Most Stringent Standard	20.0	9.0	20.0	9.0	20.0	9.0

The incremental daily emission increase associated with Base Project land uses is identified in Table 6 for reactive organic gases and oxides of nitrogen (two precursors of ozone) and PM₁₀. The Bay Area Air Quality Management District has established threshold of significance for ozone precursors and PM₁₀ of 80 pounds per day. Proposed Base Project emissions shown in Table 6 would exceed these thresholds of significance by a substantial amount, so the Base Project would have a significant effect on regional air quality.

Alternative 1

Vehicle trips generated by Alternative 1 would result in air pollutant emissions affecting the entire San Francisco Bay Air Basin. Alternative 1 is expected to generate an additional 21,700 new daily vehicle trips. Regional emissions associated with new vehicle trips have been calculated using the URBEMIS2002 emission model. The methodology used in estimating vehicular emissions is described in Appendix 2.

The incremental daily emission increase associated with Alternative 1 land uses is identified in Table 6 for reactive organic gases and oxides of nitrogen (two precursors of ozone) and PM₁₀. The Bay Area Air Quality Management District has established threshold of significance for ozone precursors and PM₁₀ of 80 pounds per day. Proposed Alternative 1 emissions shown in Table 6 would exceed these thresholds of significance by a substantial amount, so Alternative 1 would have a significant effect on regional air quality.

Alternative 2

Vehicle trips generated by Alternative 2 would result in air pollutant emissions affecting the entire San Francisco Bay Air Basin. Alternative 2 is expected to generate an additional 18,800 new daily vehicle trips. Regional emissions associated with new vehicle trips have been calculated using the URBEMIS2002 emission model. The methodology used in estimating vehicular emissions is described in Appendix 2.

The incremental daily emission increase associated with Alternative 2 land uses is identified in Table 6 for reactive organic gases and oxides of nitrogen (two precursors of ozone) and PM₁₀. The Bay Area Air Quality Management District has established threshold of significance for ozone precursors and PM₁₀ of 80 pounds per day. Proposed Alternative 2 emissions shown in Table 6 would exceed these thresholds of significance by a substantial amount, so Alternative 2 would have a significant effect on regional air quality.

Mitigation Measure 4 for the Base Project, Alternative 1 and Alternative 2: The BAAQMD has identified mitigation measures for reducing vehicle emissions from residential projects. Many of these measures, however, are predicated on the availability of substantial transit service. The site is suburban in nature with only limited transit service available. Feasible mitigation measures to reduce vehicle emissions for a suburban project would include:

Table 6: Project Regional Emissions in Pounds Per Day

	Reactive Organic Gases	Nitrogen Oxides	PM₁₀
Base Project	166.7	164.8	143.1
Alternative 1	139.9	138.9	121.5
Alternative 2	125.7	124.4	109.7
BAAQMD Significance Threshold	80.0	80.0	80.0

- Provide bicycle lanes, sidewalks and/or paths, connecting project residences to adjacent schools, parks, the nearest transit stop and nearby commercial areas. Provide a satellite tele-commute center within or near the development.
- Provide secure and conveniently placed bicycle parking and storage facilities at parks and other facilities.
- Allow only natural gas fireplaces, pellet stoves or EPA-Certified wood-burning fireplaces or stoves in single-family houses. Conventional open-hearth fireplaces should not be permitted. EPA-Certified fireplaces and fireplace inserts are 75 percent effective in reducing emissions from this source.
- Use electric lawn and garden equipment for landscaping.
- Construct transit amenities such as bus turnouts/bus bulbs, benches, shelters, etc.
- Provide direct, safe, attractive pedestrian access from project land uses to transit stops and adjacent development.
- Utilize reflective (or high albedo) and emissive roofs and light colored construction materials to increase the reflectivity of roads, driveways, and other paved surfaces, and include shade trees near buildings to directly shield them from the sun's rays and reduce local air temperature and cooling energy demand.

The commercial and office portions of the project should be required to apply TSM measures to reduce trips. Appropriate strategies would be:

- Provide physical improvements, such as sidewalk improvements, landscaping and bicycle parking that would act as incentives for pedestrian and bicycle modes of travel.
- Connect site with regional bikeway/pedestrian trail system.
- Provide transit information kiosks.
- Implement feasible travel demand management (TDM) measures for a project of this type. This would include a ride-matching program, guaranteed ride home programs, coordination with regional ridesharing organizations and transit incentives program.
- Provide showers and lockers for employees bicycling or walking to work.

- Provide secure and conveniently located bicycle parking and storage for workers and patrons.
- Provide electric vehicle charging facilities.
- Provide preferential parking for Low Emission Vehicles (LEVs).
- Specialty equipment (utility carts, forklifts, etc.) should be electrically, CNG or propane powered.
- Utilize reflective (or high albedo) and emissive roofs and light colored construction materials to increase the reflectivity of roads, driveways, and other paved surfaces, and include shade trees near buildings to directly shield them from the sun's rays and reduce local air temperature and cooling energy demand.

The above measures have the potential to reduce project-related regional emissions by 10-20%. Even with a reduction of this magnitude, Base Project, Alternative 1 and Alternative 2 emissions would remain well above the BAAQMD significance threshold of 80 pounds per day. Project regional air quality impacts would remain significant after mitigation.

Impact 5: Diesel Particulate. The project would generate additional deliveries by diesel trucks and would create new loading docks which would increase the exposure to diesel particulate at residences.

Base Project

The Base Project would result in new truck trips accessing the receiving docks on the south side of the major anchor stores. The railroad right-of-way and Pennsylvania Avenue provide a setback between the loading docks and the closest homes. In addition, these closest homes would not be downwind of the receiving docks under normal prevailing west winds.

Because of the relatively low level of truck activity, lack of extended truck idling on the project site, lack of receptors downwind of the loading dock area, and generally good ventilation characteristics of the project area during daylight hours, the project would not be considered to “expose sensitive receptors substantial levels of toxic air contaminants.” Base Project impacts related to diesel truck exhaust are considered to be less-than-significant.

Alternative 1

Alternative 1 would result in new truck trips accessing the receiving docks on the south side of the major anchor stores. The railroad right-of-way and Pennsylvania Avenue provide a setback between the loading docks and the closest homes. In addition, these closest homes would not be downwind of the receiving docks under normal prevailing west winds.

Because of the relatively low level of truck activity, lack of extended truck idling on the project site, lack of receptors downwind of the loading dock area, and generally good ventilation characteristics of the project area during daylight hours, Alternative 2 would not be considered to “expose sensitive receptors substantial levels of toxic air contaminants.” Alternative 1 impacts related to diesel truck exhaust are considered to be less-than-significant.

Alternative 2

Alternative 2 would result in new truck trips accessing the receiving docks at the rear of the major anchor store. There would be only a limited setback between the loading docks and the closest homes. However, these closest homes would not be downwind of the receiving dock under normal prevailing west winds.

Because of the relatively low level of truck activity, lack of extended truck idling on the project site, lack of receptors downwind of the loading dock area, and generally good ventilation characteristics of the project area during daylight hours, Alternative 2 would not be considered to “expose sensitive receptors substantial levels of toxic air contaminants.” Alternative 2 impacts related to diesel truck exhaust are considered to be less-than-significant.

Mitigation Measure 5 for Base Project, Alternative 1 and Alternative 2: None required.

Impact 6: Other TACs. The project would include sensitive receptors that would be exposed to mobile and possibly stationary sources of TACs.

The California Air Resources Board recently published an air quality/land use handbook.⁵ The handbook, which is advisory and not regulatory, was developed in response to recent studies that have demonstrated a link between exposure to poor air quality and respiratory illnesses, both cancer and non-cancer related. The CARB handbook recommends that planning agencies strongly consider proximity to these sources when finding new locations for "sensitive" land uses such as homes, medical facilities, daycare centers, schools and playgrounds.

Air pollution sources of concern include freeways, rail yards, ports, refineries, distribution centers, chrome plating facilities, dry cleaners and large gasoline service stations.

Key recommendations in the handbook include taking steps to avoid siting new, sensitive land uses:

- Within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day;
- Within 1,000 feet of a major service and maintenance rail yard;

⁵ California Air Resources Board, Air Quality and Land Use Handbook: A Community Health Perspective, April 2005.

- Immediately downwind of ports (in the most heavily impacted zones) and petroleum refineries;
- Within 300 feet of any dry cleaning operation (for operations with two or more machines, provide 500 feet);
- Within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater).

Base Project

The Base Project would create new residential areas. These sensitive receptors would be a substantial distance from Highway 12, but would be adjacent or near the existing railroad that traverses the site. While the CARB handbook provides siting guidelines near “major service and maintenance yards”, it contains no minimum setbacks from rail corridors. Base Project impacts related to mobile and stationary sources of TACs are considered to be less-than-significant.

Alternative 1

Alternative 1 would create new residential areas. While two of the three residential areas would be a substantial distance from Highway 12, one would front Highway 12 at the northwest corner of the site. Highway 12, which would be considered an urban road and not a freeway, does not currently carry more than 100,000 vehicles per day.

The other residential portions of Alternative 1 would be adjacent or near the existing railroad that traverses the site. While the CARB handbook provides siting guidelines near “major service and maintenance yards”, it contains no minimum setbacks from rail corridors. Alternative 1 impacts related to mobile and stationary sources of TACs are considered to be less-than-significant.

Alternative 2

Alternative 2 would create new residential areas. While two of the three residential areas would be a substantial distance from Highway 12, one would front Highway 12 at the northwest corner of the site. Highway 12, which would be considered an urban road and not a freeway, does not currently carry more than 100,000 vehicles per day.

The other residential portions of Alternative 2 would be adjacent or near the existing railroad that traverses the site. While the CARB handbook provides siting guidelines near “major service and maintenance yards”, it contains no minimum setbacks from rail corridors. Alternative 2 impacts related to mobile and stationary sources of TACs are considered to be less-than-significant.

Mitigation Measure 6 for Base Project, Alternative 1 and Alternative 2: None required.

Impact 7: Cumulative Regional Impacts. The project would have a significant impact individually on regional air quality and therefore would also have a cumulatively significant regional air quality impact.

Base Project

According to BAAQMD significance criteria, any proposed project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact. Project local impacts on carbon monoxide concentrations were found to be less than significant when combined with the effects of cumulative traffic increases (See Table 3). However, the Base Project was found to individually have a significant impact on regional air quality and thus would also have a significant cumulative impact on regional air quality (See Impact 4 and Table 6).

Alternative 1

According to BAAQMD significance criteria, any proposed project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact. Project local impacts on carbon monoxide concentrations were found to be less than significant when combined with the effects of cumulative traffic increases (See Table 4). However, Alternative 1 was found to individually have a significant impact on regional air quality and thus would also have a significant cumulative impact on regional air quality (See Impact 4 and Table 6).

Alternative 2

According to BAAQMD significance criteria, any proposed project that would individually have a significant air quality impact would also be considered to have a significant cumulative air quality impact. Project local impacts on carbon monoxide concentrations were found to be less than significant when combined with the effects of cumulative traffic increases (See Table 5). However, Alternative 2 was found to individually have a significant impact on regional air quality and thus would also have a significant cumulative impact on regional air quality (See Impact 4 and Table 6).

Mitigation Measure 7 for Base Project, Alternative 1 and Alternative 2: Same as Mitigation Measure 4.

APPENDIX 1

CALINE-4 MODELING

The CALINE-4 model is a fourth-generation line source air quality model that is based on the Gaussian diffusion equation and employs a mixing zone concept to characterize pollutant dispersion over the roadway. Given source strength, meteorology, site geometry and site characteristics, the model predicts pollutant concentrations for receptors located within 150 meters of the roadway. The CALINE-4 model allows roadways to be broken into multiple links that can vary in traffic volume, emission rates, height, width, etc.

A screening-level form of the CALINE-4 program was used to predict concentrations.⁶ Normalized concentrations for each roadway size (2 lanes, 4 lanes, etc.) are adjusted for the two-way traffic volume and emission factor. Calculations were made for a receptor at a corner of the intersection, located at the curb. Emission factors were derived from the California Air Resources Board EMFAC7-2002 computer program based on a 2006 and 2030 Bay Area vehicle mix.

The screening form of the CALINE-4 model calculates the local contribution of nearby roads to the total concentration. The other contribution is the background level attributed to more distant traffic. The 1-hour background level in 2005 was taken as 3.7 PPM and the 8-hour background concentration was taken as 1.9 PPM. The 1-hour background level in 2030 was taken as 3.5 PPM and the 8-hour background concentration was taken as 1.7 PPM. These backgrounds were estimated using isopleth maps and correction factors developed by the Bay Area Air Quality Management District.

Eight-hour concentrations were obtained from the 1-hour output of the CALINE-4 model using a persistence factor of 0.7.

⁶ Bay Area Air Quality Management District, BAAQMD CEQA Guidelines, 1996 (Revised 1999).

APPENDIX 2

URBEMIS-2002

Estimates of regional emissions generated by project traffic were made using a program called URBEMIS-2002 (Version 8.7).⁷ URBEMIS-2002 is a program that estimates the emissions that result from various land use development projects. Land use project can include residential uses such as single-family dwelling units, apartments and condominiums, and nonresidential uses such as shopping centers, office buildings, and industrial parks. URBEMIS-2002 contains default values for much of the information needed to calculate emissions. However, project-specific, user-supplied information can also be used when it is available.

Inputs to the URBEMIS-2002 program include trip generation rates, vehicle mix, average trip length by trip type and average speed. Trip generation rates for project land uses were provided by the project transportation consultant. Average trip lengths and vehicle mixes for the Bay Area were used. Average speed for all types of trips was assumed to be 30 MPH. The URBEMIS-2002 run assumed summertime conditions with an ambient temperature of 85 degrees F.

The analysis was carried out assuming project build-out would occur by the year 2007. The URBEMIS-2002 output is attached.

⁷ Jones and Stokes Associates, Software User's Guide: URBEMIS2002 for Windows with Enhanced Construction Module, Version 8.7, April 2005.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version
8.7\Projects2k2\gentrysuisun.urb
Project Name: Suisun Gentry Base Project
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)	166.65	164.75	1,664.93	0.95	143.10

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version
8.7\Projects2k2\gentrysuisun.urb
Project Name: Suisun Gentry Base Project
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
Condo/townhouse general	20.87	19.61	206.71	0.12	18.63
Regnl shop. center	144.03	143.25	1,438.44	0.81	122.65
Office park	1.75	1.89	19.78	0.01	1.82
TOTAL EMISSIONS (lbs/day)	166.65	164.75	1,664.93	0.95	143.10

Includes correction for passby trips.
Includes the following double counting adjustment for internal trips:
Residential trips: 0.00 % reduction. Nonresidential trips: 0.00 % reduction.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Condo/townhouse general	22.44	5.30 trips/dwelling unit	359.00	1,902.70
Regnl shop. center		34.02 trips/1000 sq. ft.	720.8424	522.94
Office park		11.01 trips/1000 sq. ft.	15.68	172.66
			Sum of Total Trips	26,598.30
			Total Vehicle Miles Traveled	93,838.58

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent	Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20		1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10		3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10		1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10		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	0.10		0.00	0.00	100.00
Motorcycle	1.70		82.40	17.60	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)						
Regnl shop. center				2.0	1.0	97.0
Office park				48.0	24.0	28.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/22.44 to 5.3/22.44

Changes made to the default values for Operations

The double counting option switch changed from off to on.
The operational emission year changed from 2005 to 2007.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version
8.7\Projects2k2\suisungentrybaseproject.urb
Project Name: Suisun Gentry Alt. 1
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)	139.91	138.85	1,407.44	0.81	121.53

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version
8.7\Projects2k2\suisungentrybaseproject.urb
Project Name: Suisun Gentry Alt. 1
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
Condo/townhouse general	23.56	22.03	232.31	0.14	20.93
Regnl shop. center	111.14	111.46	1,119.21	0.63	95.43
Office park	0.45	0.48	5.04	0.00	0.46
General light industry	4.76	4.87	50.88	0.03	4.70
TOTAL EMISSIONS (lbs/day)	139.91	138.85	1,407.44	0.81	121.53

Includes correction for passby trips.
Includes the following double counting adjustment for internal trips:
Residential trips: 0.00 % reduction. Nonresidential trips: 0.00 % reduction.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Condo/townhouse general	25.75	5.19 trips/dwelling unit	412.00	2,138.28
Regnl shop. center		38.94 trips/1000 sq. ft.	490.00	19,080.60
Office park		11.01 trips/1000 sq. ft.	4.00	44.04
General light industry		6.97 trips/1000 sq. ft.	62.00	432.14
Sum of Total Trips				21,695.06
Total Vehicle Miles Traveled				79,699.56

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	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	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	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-	Home-	Home-	

	Work	Shop	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)						
Regnl shop. center				2.0	1.0	97.0
Office park				48.0	24.0	28.0
General light industry				50.0	25.0	25.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/25.75 to 5.19/25.75

Changes made to the default values for Operations

The double counting option switch changed from off to on.
The operational emission year changed from 2005 to 2007.

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version
8.7\Projects2k2\suisungentryalt1.urb
Project Name: Suisun Gentry Alt. 2
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)	125.67	124.39	1,265.20	0.73	109.70

URBEMIS 2002 For Windows 8.7.0

File Name: C:\Program Files\URBEMIS 2002 Version
8.7\Projects2k2\suisungentryalt1.urb
Project Name: Suisun Gentry Alt. 2
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
Condo/townhouse general	30.03	27.81	293.24	0.18	26.42
Regnl shop. center	90.43	91.23	916.03	0.52	78.11
Office park	0.45	0.48	5.04	0.00	0.46
General light industry	4.76	4.87	50.88	0.03	4.70
TOTAL EMISSIONS (lbs/day)	125.67	124.39	1,265.20	0.73	109.70

Includes correction for passby trips.
Includes the following double counting adjustment for internal trips:
Residential trips: 0.00 % reduction. Nonresidential trips: 0.00 % reduction.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2007 Temperature (F): 85 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Condo/townhouse general	33.88	4.98 trips/dwelling unit	542.00	2,699.16
Regnl shop. center		43.38 trips/1000 sq. ft.	360.00	15,616.80
Office park		11.01 trips/1000 sq. ft.	4.00	44.04
General light industry		6.97 trips/1000 sq. ft.	62.00	432.14
Sum of Total Trips				18,792.14
Total Vehicle Miles Traveled				71,943.97

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.20	1.80	97.80	0.40
Light Truck < 3,750 lbs	15.10	3.30	94.00	2.70
Light Truck 3,751- 5,750	16.10	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.10	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	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	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-	Home-

	Work	Shop	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)						
Regnl shop. center				2.0	1.0	97.0
Office park				48.0	24.0	28.0
General light industry				50.0	25.0	25.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general
have changed from the defaults 6.9/33.88 to 4.98/33.88

Changes made to the default values for Operations

The double counting option switch changed from off to on.

NOISE

INTRODUCTION

The proposed Gentry/Suisun Project is a mixed-use, commercial and residential development located immediately west of Suisun City and immediately south of the City of Fairfield. It is situated on the USGS Fairfield South 7.5' topographic quadrangle. The site is bordered on the north by Highway 12, on the east by a Southern Pacific Railroad (SPRR) line, on the south by Cordelia Road and a SPRR spur line, and on the west by Ledgewood Creek. Pennsylvania Avenue crosses north to south through the center of the site. The site is located within the Suisun City sphere of influence. Existing land uses in the vicinity of the project site include commercial, industrial, and residential uses. Figures 1-3 shows the project site plan and alternatives.

This section discusses the existing noise environment in the immediate project vicinity, and identifies potential impacts and mitigation measures related to the project.

ENVIRONMENTAL SETTING

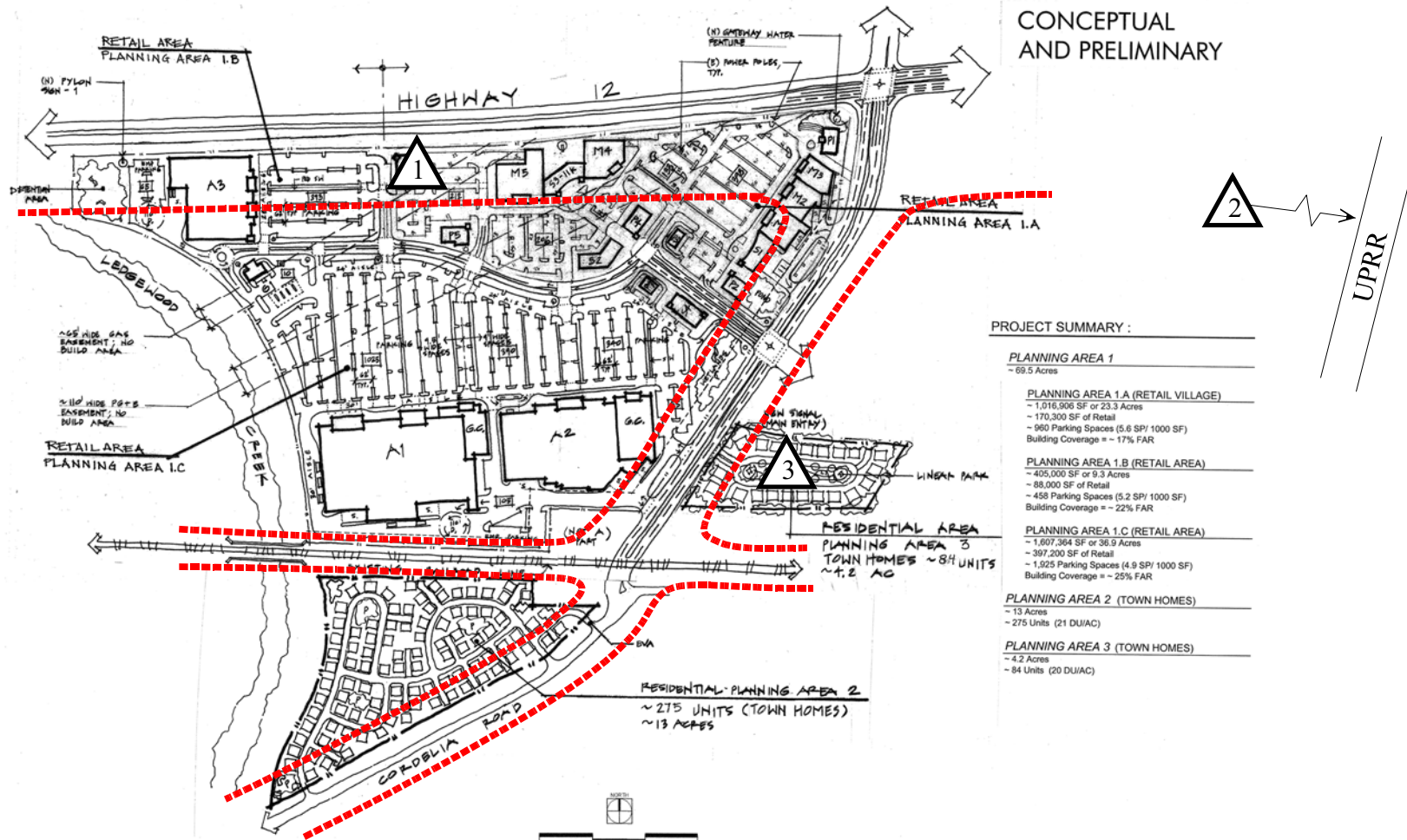
Acoustical Terminology

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound, and is expressed as cycles per second, called Hertz (Hz).

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by the A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels. Table 1 provides the descriptions of the various acoustical terminologies.

Figure 1
Gentry-Suisun Annexation EIR - City of Suisun/Solano County, California
Site Plan and Noise Measurement Sites
Base Project



CONCEPTUAL AND PRELIMINARY

PROJECT SUMMARY :

PLANNING AREA 1	~ 69.5 Acres
PLANNING AREA 1.A (RETAIL VILLAGE)	~ 1,016,906 SF or 23.3 Acres ~ 170,360 SF of Retail ~ 960 Parking Spaces (5.6 SP/1000 SF) Building Coverage = ~ 17% FAR
PLANNING AREA 1.B (RETAIL AREA)	~ 405,000 SF or 9.3 Acres ~ 88,000 SF of Retail ~ 458 Parking Spaces (5.2 SP/1000 SF) Building Coverage = ~ 22% FAR
PLANNING AREA 1.C (RETAIL AREA)	~ 1,807,364 SF or 38.9 Acres ~ 397,200 SF of Retail ~ 1,925 Parking Spaces (4.9 SP/1000 SF) Building Coverage = ~ 25% FAR
PLANNING AREA 2 (TOWN HOMES)	~ 13 Acres ~ 275 Units (21 DU/AC)
PLANNING AREA 3 (TOWN HOMES)	~ 4.2 Acres ~ 84 Units (20 DU/AC)

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OVERALL MASTER PLAN - BASE PROJECT

Gentry - Suisun Project

HIGHWAY 12 & PENNSYLVANIA AVENUE
 SUISUN • CALIFORNIA

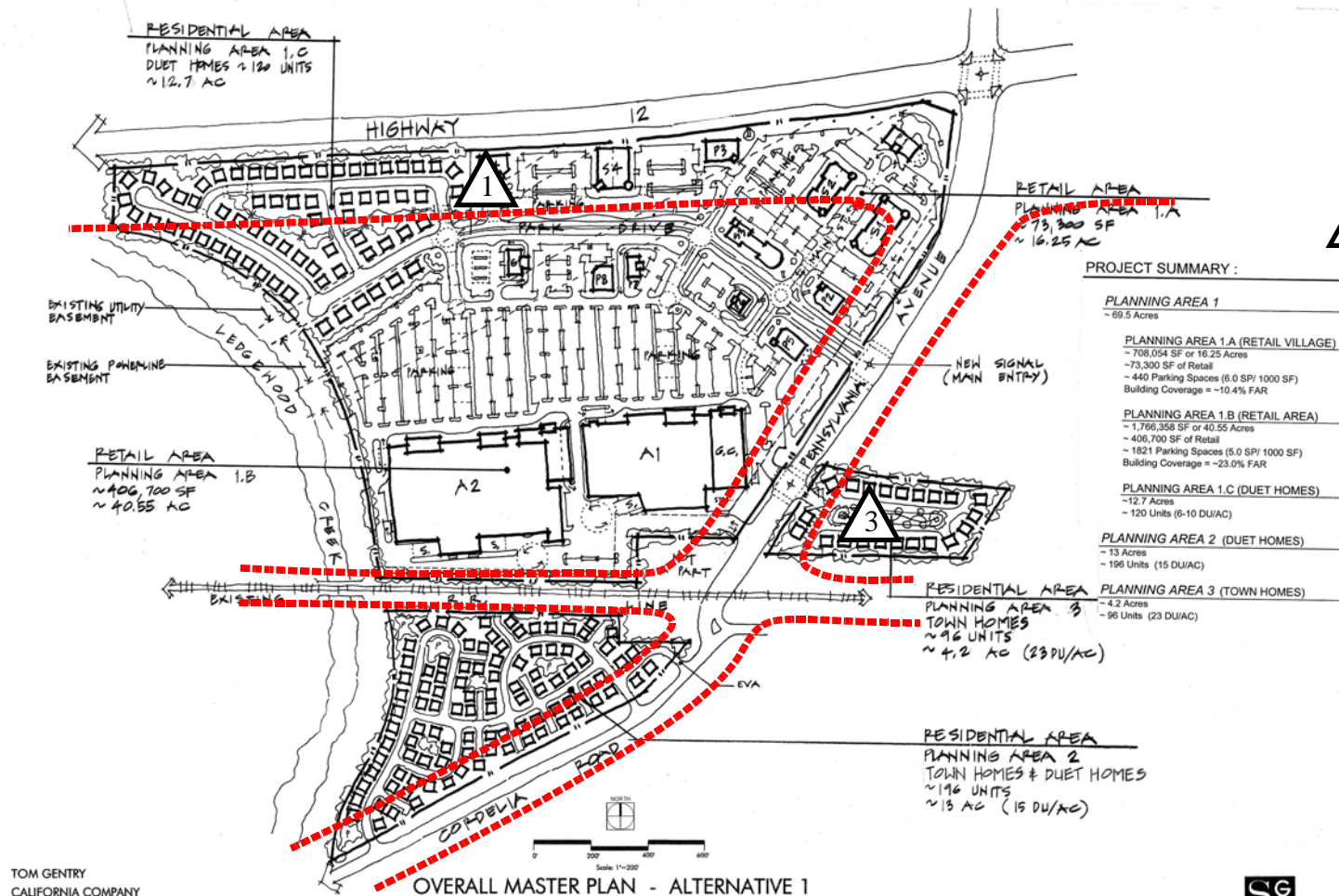
SGPA ARCHITECTURE • PLANNING
 SAN DIEGO SAN FRANCISCO
 Project No. 0603.P01
 Date: 01/12/06



- : Noise Measurement Site
- : Predicted 65 dB Ldn Unmitigated Traffic (Cumulative +Project) & Railroad Noise Contours

Figure 2
Gentry-Suisun Annexation EIR - City of Suisun/Solano County, California
Site Plan and Noise Measurement Sites
Alternative 1

**CONCEPTUAL
 AND PRELIMINARY**



PROJECT SUMMARY :

- PLANNING AREA 1**
 ~ 69.5 Acres
 - PLANNING AREA 1.A (RETAIL VILLAGE)**
 ~ 708,054 SF or 16.25 Acres
 ~ 73,300 SF of Retail
 ~ 440 Parking Spaces (6.0 SP/ 1000 SF)
 Building Coverage = ~10.4% FAR
 - PLANNING AREA 1.B (RETAIL AREA)**
 ~ 1,766,358 SF or 40.55 Acres
 ~ 406,700 SF of Retail
 ~ 1821 Parking Spaces (5.0 SP/ 1000 SF)
 Building Coverage = ~23.0% FAR
 - PLANNING AREA 1.C (DUET HOMES)**
 ~ 12.7 Acres
 ~ 120 Units (6-10 DU/AC)
- PLANNING AREA 2 (DUET HOMES)**
 ~ 13 Acres
 ~ 196 Units (15 DU/AC)
- PLANNING AREA 3 (TOWN HOMES)**
 ~ 4.2 Acres
 ~ 96 Units (23 DU/AC)

TOM GENTRY
 CALIFORNIA COMPANY
 HONOLULU, HAWAII

OVERALL MASTER PLAN - ALTERNATIVE 1

Gentry - Suisun Project

HIGHWAY 12 & PENNSYLVANIA AVENUE
 SUISUN • CALIFORNIA

SGPA ARCHITECTURE • PLANNING
 SAN DIEGO SAN FRANCISCO
 Project No. 00030001 Date: 01.17.06 415.983.0131 copyright 2006

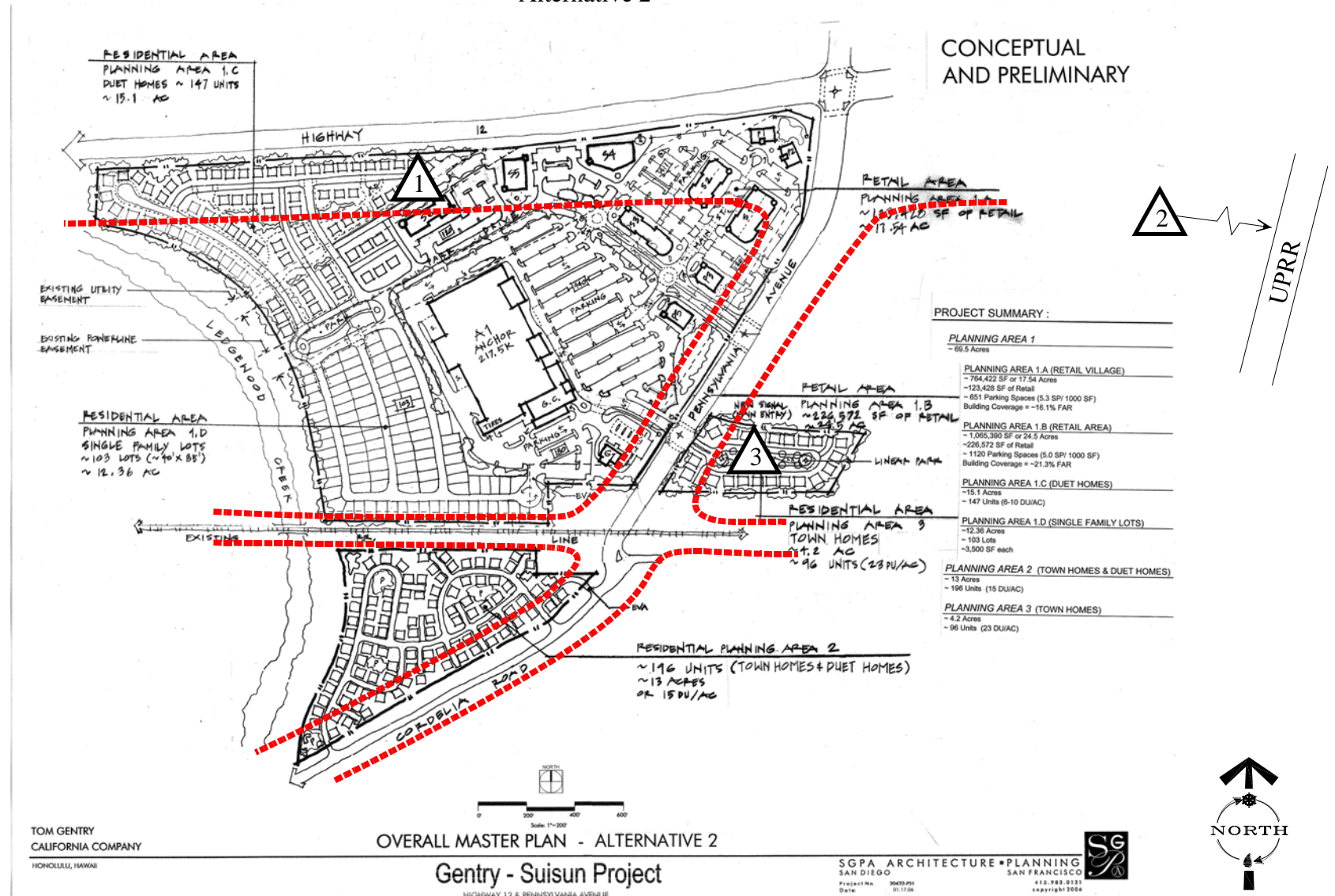


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consultants in acoustics

: Noise Measurement Site

: Predicted 65 dB Ldn Unmitigated Traffic (Cumulative +Project) & Railroad Noise Contours

Figure 3
Gentry-Suisun Annexation EIR - City of Suisun/Solano County, California
Site Plan and Noise Measurement Sites
Alternative 2



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consultants in acoustics

△ : Noise Measurement Site

----- : Predicted 65 dB Ldn Unmitigated Traffic (Cumulative +Project) & Railroad Noise Contours



Table 1
Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
Attenuation	The reduction of noise.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
Loudness	A subjective term for the sensation of the magnitude of sound.
Noise	Unwanted sound.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.

Community noise is commonly described in terms of the "ambient" noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (Leq), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time-varying signal over a given time period (usually one hour). The Leq is the foundation of the composite noise descriptors such as Ldn and CNEL, and shows very good correlation with community response to noise.

The Day-night Average Level (Ldn) is based upon the average noise level over a 24-hour day, with a +10 decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because Ldn represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Major Noise Sources in the Project Vicinity

Motor vehicle traffic and railroad operations are the major contributors to the existing noise environment in the project vicinity. Vehicular noise within the project vicinity occurs primarily along Highway 12, Pennsylvania Avenue, and Cordelia Road. Railroad noise from SPRR operations occur along both the southern and eastern boundaries of the proposed project.

Noise-Sensitive Land Uses in the Project Vicinity

Noise sensitive land uses in the project vicinity generally consist of single-family residential houses approximately 540 feet to the north, 310 feet to the northwest, and 1600 feet to the east.

Existing Noise Environment in the Project Vicinity

Existing Traffic Noise Levels

To determine the existing traffic noise levels at the identified sensitive receivers within the project vicinity, the Federal Highway Administration Highway Traffic Noise Prediction Model (FHWA-RD-77-108) was used with the California Vehicle Noise Emission Levels. The FHWA Model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. Truck usage and vehicle speeds on Highway 12 were estimated from field observations and Caltrans data.

Table 2 shows the predicted existing traffic noise levels in terms of the Day/Night Average Level descriptor (Ldn) at a standard distance of 100 feet from the centerlines of the existing immediate project-area roadways for existing conditions, as well as distances to existing traffic noise contours. The extent of which existing land uses in the project vicinity are affected by existing traffic noise depends on their respective proximity to the roadways and their individual sensitivity to noise. Appendix A provides the complete inputs and results to the FHWA model.

Table 2					
Existing Traffic Noise Levels and Distances to Contours					
Roadway	Segment	Ldn @ 100 Feet	Distance to Contours (feet)		
			70 dB Ldn	65 dB Ldn	60 dB Ldn
Texas Street	Pennsylvania to Jackson	63.1	35	75	161
Texas Street	Jackson to Webster	63.5	37	80	172
Texas Street	E. of Webster	63.8	39	83	180
Woolner Ave	W. of Beck	57.0	14	29	63
Hwy 12	Beck to Pennsylvania	70.4	106	228	490
Hwy 12	Pennsylvania to Marina	71.5	126	271	585
Hwy 12	E. of Grizzly	69.1	88	189	406
Lotz Way	Main to Civic Center	60.9	25	53	115
Cordelia Road	W. of Beck	59.7	20	44	95
Cordelia Road	Beck to Pennsylvania	59.5	20	43	93
Cordelia Road	Pennsylvania to Main	57.3	14	31	66
Cordelia Road	E. of Main	52.2	7	14	30
Beck Ave	Hwy 12 to Cordelia	54.3	9	19	41
Pennsylvania St.	N. of Texas	64.8	45	98	211
Pennsylvania St.	Texas to Hwy 12	63.5	37	80	172
Pennsylvania St.	Hwy 12 to Cordelia	57.3	14	31	66
Jackson St	S. of Texas	60.3	23	49	105
Webster St.	S. of Texas	59.4	20	42	91
Main St.	Lotz to Cordelia	57.3	14	31	67
Main St.	S. of Cordelia	44.8	2	5	10
Civic Center Blvd	S. of Lotz	56.1	12	25	55
Marina Blvd	S. of Hwy 12	58.4	17	36	78

Notes: Source: FHWA-RD-77-108 with inputs from Fehr & Peers Transportation Consultants, Caltrans and j.c. brennan & associates, Inc.
Distances to traffic noise contours are measured in feet from the centerlines of the roadways.

Existing Railroad Noise Levels

Railroad activity within the project vicinity occurs along the two SPRR lines located near both the southern and eastern boundaries of the project area. The SPRR line along the southern border of the site is a spur line while the SPRR line along the eastern border is a main line. j.c. brennan & associates, Inc. staff conducted continuous hourly noise measurements adjacent to the railroad tracks from 12:00 p.m. December 31st, 2003 to 12:00 p.m. January 1st, 2004. The sound level meter was programmed to collect single event noise level data due to train pass bys on the project site, as well as overall hourly noise level data. The noise level measurements were conducted at a distance 60 feet south of the centerline of the SPRR spur line railroad tracks that border the southern side of the project site near where the spur line branches off to the west from the main north to south SPRR line. This noise measurement site was chosen for security purposes regarding the safety of noise measurement equipment. Figure 1 shows the location of the noise measurement sites.

Instrumentation consisted of LDL Model 820 precision integrating sound level meters. The systems were calibrated before use with a LDL CAL-200 acoustical calibrator to ensure accuracy of the measurements.

The purpose of the noise level measurements was to determine typical sound exposure levels (SEL) for railroad line operations within the project vicinity, accounting for the effects of travel speed and other factors that affect noise generation. In addition, the noise measurement equipment was programmed to identify individual train operations, so that the typical number of train operations could be determined. j.c. brennan & associates, Inc. analyzed existing noise levels associated with both the SPRR main line and the SPRR spur line train activity and the analyses are as follow:

Existing Noise Levels Associated With Southern Pacific Railroad Main Line Train Activity

Due to the proximity of the 24-hour noise measurement site to the two SPRR lines that border the site, the data collected included noise level measurement data associated with train activity on the SPRR spur line, train activity on the SPRR main line, and also traffic noise from Cordelia Road. The data was indiscernible as to which noise event was associated with its respective source. Therefore, in order to predict noise levels on the project site due to activity on the main SPRR line, noise measurement data collected for another noise study conducted in the City of Fairfield (Pentecostal Church Day Care Center, Bollard & Brennan, Inc. - Project # 2000-124) was utilized. The referenced project site is located north of the Suisun/Gentry Mixed Use Development Project along the same SPRR main line. Based upon noise measurement results for the referenced project, the mean sound exposure level associated with train operations were 107.3 dB SEL at a distance of 60 feet from the main SPRR line. The results of the data collected for the referenced project also indicated that approximately 30 trains per day (22 per daytime hours and 8 per nighttime hours) operate on the track adjacent to the project site.

To determine the distances to the Ldn railroad contours, it was necessary to calculate the Ldn for typical train operations. This was done using the collected SEL values, daily number of trains, and the distribution of daily freight train operations. The Ldn may be calculated as follows:

$$\text{Ldn} = \text{SEL} + 10 \log N_{\text{eq}} - 49.4 \text{ dB, where:}$$

SEL is the mean SEL of the event, N_{eq} is the sum of the number of daytime events (7 a.m. to 10 p.m.) per day plus ten times the number of nighttime events (10 p.m. to 7 a.m.) per day, and 49.4 is ten times the logarithm of the number of seconds per day. Based upon the above-described noise level data, number of operations and methods of calculation, the Ldn value for railroad line operations have been calculated. The calculations are based upon the number of freight train operations per day for both directions, and the distribution of the trains throughout the daytime and nighttime hours.

Based upon the above-described noise level data, number of operations, and methods of calculation, the Ldn value for SPRR main line operations adjacent to the referenced project site were calculated to be 78 dB Ldn at a distance of 60 feet from the centerline of the SPRR main line tracks. The 60 dB Ldn railroad noise contour is calculated to be located approximately 951 feet from the railroad centerline. The 65 dB Ldn contour is calculated to be located approximately 441 feet from the railroad centerline.

Existing Noise Levels Associated With Southern Pacific Railroad Spur Line Train Activity

Based upon field observations and information collected from local businesses, it was conservatively assumed that six train operations occur along the spur line per day randomly distributed during the daytime and nighttime hours. j.c. brennan & associates, Inc. staff also observed and measured the sound exposure level of a train pass by on the SPRR spur line near the project site in the Solano Business Park area near the SPRR spur line crossing at Beck Avenue. The observed speed of the train on the spur line was relatively slow. The measured sound exposure level associated with the SPRR spur line train pass by was measured to be 89 dB SEL at a distance of 270 feet from the center line of the spur line tracks. Based upon the above-described noise level data, number of operations, and methods of calculation, the Ldn value for SPRR spur line operations adjacent to the project site were calculated to be 54 dB Ldn at a distance of 270 feet from the centerline of the SPRR main line tracks. Based upon these calculations, the predicted 60 dB Ldn railroad noise contour would be located approximately 107 feet from the railroad centerline. The predicted 65 dB Ldn railroad noise contour would be located approximately 50 feet from the railroad centerline.

Ambient Noise Levels:

To quantify existing ambient noise levels in the vicinity of the project site, j.c. brennan & associates, Inc. staff conducted short-term noise level measurements at one location on the project site, and continuous hourly noise level measurements at one location near the project site (See Figure 1 for noise measurement locations). The noise level measurements were conducted between December 31, 2003 and January 1, 2004. The noise level measurements were conducted to determine typical background noise levels and for comparison to the project noise levels. Table 3 shows a summary of the noise measurement results. Figure 4 graphically shows the results of the continuous hourly noise level measurements.

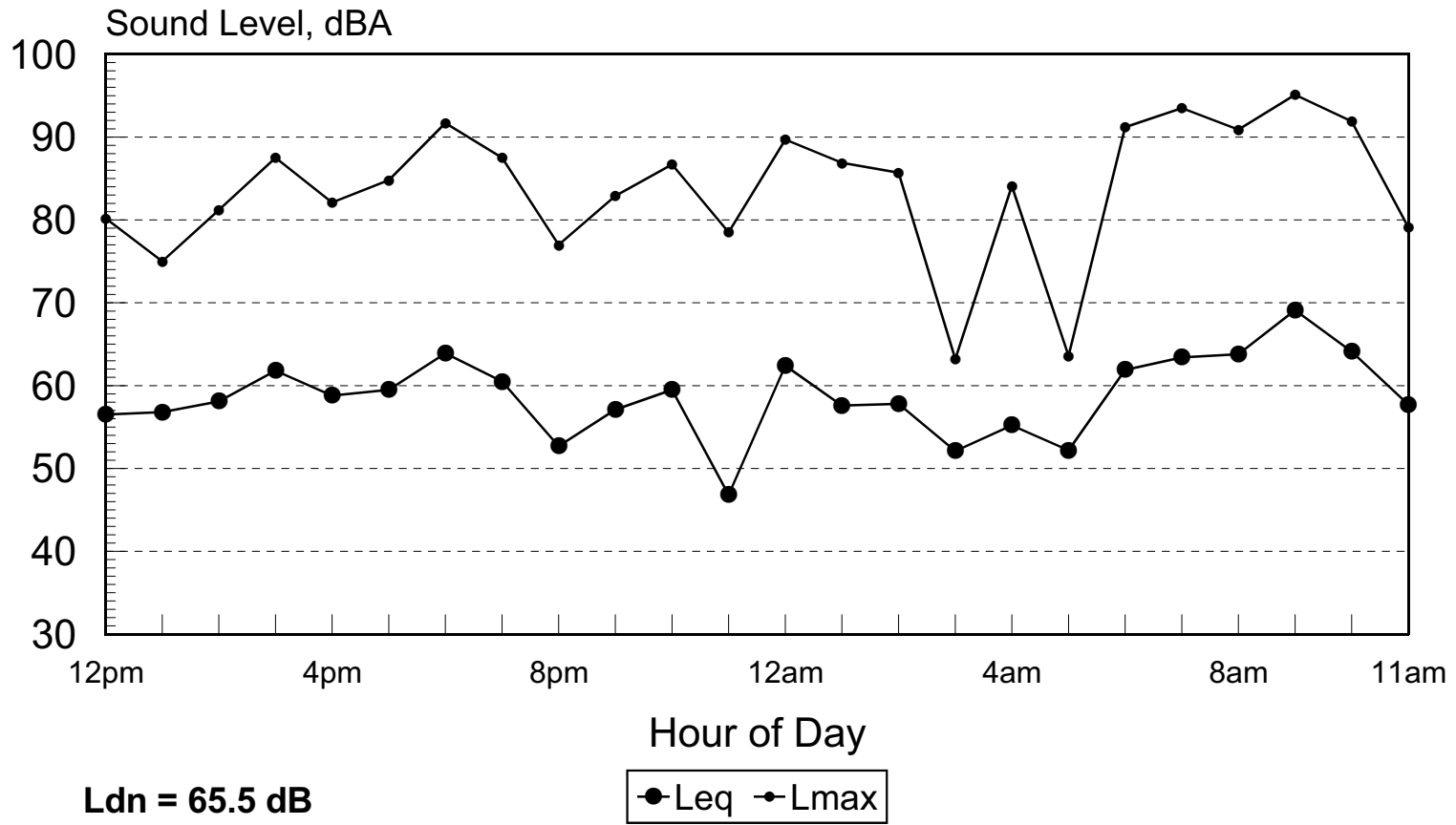
Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used for the noise level measurement survey. The meters were calibrated before and after use with an LDL Model CAL-200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

**Table 3
Existing Ambient Noise Monitoring Results**

Site	Location	Date - Time	Average Measured Hourly Noise Levels, dBA						
			24-hour Ldn	Daytime (7:00 am - 10:00 pm)			Nighttime (10:00 pm - 7 am)		
				Leq	L50	Lmax	Leq	L50	Lmax
1	Adjacent to Hwy 12	11/24/03 – 1:11 pm	NA	68	NA	79.5	NA		
2	Adjacent to SPRR	12/31/03 – 1/1/04	65.5	62.2	52.6	85.3	58.3	46.3	43.2
3	Central portion of Proposed Residential Area	12/31/03 - 12:00 pm (15 minute interval)	NA	54.6	52.3	67.6	NA		

Notes: Source - j.c. brennan & associates, Inc.

Figure 4
Continuous Hourly Measured Noise Levels
Gentry - Suisun Mixed Use Development
Wednesday December 31, 2003 - Thursday January 1, 2004



REGULATORY SETTING

City of Suisun City General Plan

In order to comply with state law requirements regarding noise elements, the City of Suisun City General Plan Noise Element adopts the noise standards set forth in the Solano County General Plan Health and Safety Element.

The City of Suisun General Plan Noise Element also establishes five policies regarding noise. A summary of these policies is provided below. Based upon conversations with the City of Suisun planning staff, these policies should be used for the evaluation of new projects.

Policy 1: Travis Air Force Base Plan. *This policy deals with areas covered by the Travis Air Force Base Comprehensive Airport Lane Use Plan. Because the Gentry-Suisun project is located outside of this plan area, Policy 1 would not apply to the proposed project.*

Policy 2: Highway 12 Setbacks. The City shall require setbacks and/or other noise mitigation measures for residences adjacent to Highway 12, along arterial streets, within the proximity of the Southern Pacific Railroad, or near any other circulation-related source of noise that may exceed the recommended exterior noise level of CNEL 65dB that are sufficient to reduce the noise level to 65dB or less.

Policy 3: Commercial Vehicles. Commercial vehicles shall be prohibited in residential areas except to make deliveries to or provide services to residences.

Policy 4: Protection of Residential Land Use from Non-Residential Noise Sources. In designating the appropriate location of commercial and industrial land uses vis-à-vis residential land uses, the City shall seek to minimize potential noise conflicts by assuring that noise received by commercial or industrial land uses does not exceed a CNEL 65dB. To ensure that recommended standards for exterior and interior noise are not exceeded, the City may require commercial and industrial developments to adopt noise mitigation measures and may require residential developments near commercial and industrial uses to mitigate potential noise exposure through site design and other appropriate measures. Mitigation measures may include restrictions on the hours of operation of certain equipment, the construction of a sound wall or earth berming to protect residential land uses from the sources of noise, minimum distance requirements for dwelling units and commercial/industrial buildings, and construction requirements to reduce interior noise levels.

It should be noted that the CNEL/Ldn standard applied in Policy 2 would disguise short-term variations in the noise environment because the CNEL/Ldn noise level is based upon a 24-hour average with penalties applied for evening and nighttime hours. Therefore, there is a potential for annoyance to residential uses adjacent to commercial uses. The City may wish to implement buyer/renter notification for all residential uses adjacent to commercial areas. The buyer/renter notification should inform residents that every attempt has been made to ensure compliance with the applicable City of Suisun noise standards, however, periods of elevated noise levels may occur.

Policy 5: Noise Complaints. The City shall maintain and publicize a procedure whereby residents can register noise complaints.

Determination of a Significant Increase in Noise Levels

Another means of determining a potential noise impact is to assess a person’s reaction to changes in noise levels due to a project. Table 4 is commonly used to show expected public reaction to changes in environmental noise levels. This table was developed on the basis of test subjects' reactions to changes in the levels of steady-state pure tones or broad-band noise and to changes in levels of a given noise source. It is probably most applicable to noise levels in the range of 50 to 70 dBA, as this is the usual range of voice and interior noise levels.

<p align="center">Table 4 Subjective Reaction to Changes in Noise Levels of Similar Sources</p>		
Change in Level, dBA	Subjective Reaction	Factor Change in Acoustical Energy
1	Imperceptible (Except for Tones)	1.3
3	Just Barely Perceptible	2.0
6	Clearly Noticeable	4.0
10	About Twice (or Half) as Loud	10.0
<p>Source: Architectural Acoustics, M. David Egan, 1988.</p>		

IMPACTS AND MITIGATION MEASURES

Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local planning criteria or ordinances, or substantially increase noise levels at noise-sensitive land uses.

STANDARDS OF SIGNIFICANCE

CEQA guidelines state that implementation of the project would result in significant noise impacts if the project would result in either of the following:

- a. Exposure of persons to or generation of noise levels in excess of standards established in the City of Suisun General Plan. Specifically, exterior and interior noise levels of 65 and 45 dB CNEL/Ldn, respectively, for residential uses exposed to transportation or non-transportation noise sources.
- b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.
- c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, defined as 3 dB or greater.
- d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, defined as 3 dB or greater.
- 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, where the project would expose people residing or working in the area to excessive noise levels.
- f. For a project within the vicinity of a private airstrip, where the project would expose people residing or working in the project area to excessive noise levels.

Because there are no existing or proposed significant sources of groundborne vibration or groundborne noise associated with this project, analysis of item “b” above is not warranted. The project is not located within an airport land use plan or in the vicinity of a private airstrip; therefore items “e” and “f” would also not apply.

Traffic Noise Impact Assessment Methodology

To assess noise impacts due to project-related traffic increases on the existing local roadway network, traffic noise levels are predicted at a representative distance for both existing and cumulative without and with project conditions.

The FHWA traffic noise prediction model was used to predict existing plus project traffic noise levels at a representative distance of 100 feet from the roadway centerline. Table 5 shows the predicted traffic noise level increases on the local roadway network for existing conditions. Table 6 shows the predicted traffic noise level increases on the local roadway network for cumulative conditions. Appendices A-H provides the complete inputs and results to the FHWA model for each of the traffic scenarios.

**Table 5
Existing Traffic Noise Levels With & Without Project**

Roadway	Segment	Noise Levels (Ldn, dB) 100 Feet From Centerline						
		Existin g No Project (dB)	Existing Plus Base Project (dB)	Change (dB)	Existin g Plus Alt 1 (dB)	Change (dB)	Existing Plus Alt 2 (dB)	Change (dB)
Texas Street	Pennsylvania to Jackson	63.1	63.8	0.7	63.6	0.5	63.5	0.4
Texas Street	Jackson to Webster	63.5	64.3	0.7	64.1	0.5	64.0	0.5
Texas Street	E. of Webster	63.8	64.5	0.7	64.3	0.5	64.3	0.5
Woolner Ave	W. of Beck	57.0	57.4	0.4	57.3	0.2	57.3	0.2
Hwy 12	Beck to Pennsylvania	70.4	70.8	0.5	70.7	0.4	70.7	0.3
Hwy 12	Pennsylvania to Marina	71.5	71.9	0.4	71.8	0.3	71.8	0.3
Hwy 12	E. of Grizzly	69.1	69.5	0.4	69.4	0.3	69.4	0.2
Lotz Way	Main to Civic Center	60.9	61.8	0.9	61.6	0.7	61.6	0.7
Cordelia Road	W. of Beck	59.7	60.2	0.6	60.1	0.4	60.2	0.6
Cordelia Road	Beck to Pennsylvania	59.5	61.7	2.2	60.9	1.4	60.8	1.3
Cordelia Road	Pennsylvania to Main	57.3	59.9	2.5	59.2	1.9	59.0	1.7
Cordelia Road	E. of Main	52.2	54.7	2.5	54.2	1.9	54.1	1.8
Beck Ave	Hwy 12 to Cordelia	54.3	54.8	0.5	54.5	0.2	54.5	0.2
Pennsylvania St.	N. of Texas	64.8	65.9	1.1	65.7	0.8	65.6	0.7
Pennsylvania St.	Texas to Hwy 12	63.5	65.8	2.2	65.4	1.8	65.2	1.7
Pennsylvania St.	Hwy 12 to Cordelia ¹	57.3	60.7	3.4	60.5	3.2	60.2	2.9
Jackson St	S. of Texas	60.3	60.8	0.5	60.8	0.5	60.7	0.4
Webster St.	S. of Texas	59.4	60.1	0.7	60.0	0.6	59.9	0.5
Main St.	Lotz to Cordelia	57.3	58.5	1.2	58.2	0.8	58.1	0.7
Main St.	S. of Cordelia	44.8	52.0	7.2	51.0	6.2	50.5	5.7
Civic Center Blvd	S. of Lotz	56.1	58.6	2.5	58.2	2.1	58.0	2.0
Marina Blvd	S. of Hwy 12	58.4	59.2	0.8	59.1	0.7	59.0	0.6

Bold = Significant increase in noise.

¹There are no existing noise sensitive uses adjacent to this roadway segment, therefore, this increase is not considered significant
Source: FHWA-RD-77-108 with inputs from Fehr & Peers Transportation Consultants, Caltrans and j.c. brendan & associates, Inc.

**Table 6
Cumulative Traffic Noise Levels With & Without Project**

Roadway	Segment	Noise Levels (Ldn, dB) 100 Feet From Centerline						
		Cumulative No Project (dB)	Cumulative Plus Base Project (dB)	Change (dB)	Cumulative Plus Alt 1 (dB)	Change (dB)	Cumulative Plus Alt 2 (dB)	Change (dB)
Texas Street	Pennsylvania to Jackson	65.2	65.6	0.5	65.5	0.3	65.5	0.3
Texas Street	Jackson to Webster	65.4	65.9	0.5	65.7	0.4	65.7	0.3
Texas Street	E. of Webster	65.4	65.9	0.5	65.8	0.4	65.7	0.3
Woolner Ave	W. of Beck	59.3	60.6	1.3	60.6	1.3	60.6	1.3
Hwy 12	Beck to Pennsylvania	72.0	72.3	0.3	72.3	0.3	72.2	0.2
Hwy 12	Pennsylvania to Marina	74.0	74.2	0.2	74.2	0.2	74.1	0.1
Hwy 12	E. of Grizzly	72.1	72.3	0.2	72.3	0.1	72.2	0.1
Lotz Way	Main to Civic Center	62.8	63.3	0.5	63.1	0.3	63.1	0.3
Cordelia Road	W. of Beck	64.2	64.5	0.2	64.4	0.2	64.4	0.1
Cordelia Road	Beck to Pennsylvania	64.7	65.5	0.8	65.6	0.9	65.2	0.4
Cordelia Road	Pennsylvania to Main	63.7	64.4	0.7	64.2	0.5	64.1	0.5
Cordelia Road	E. of Main	53.5	55.5	2.0	55.1	1.5	54.9	1.4
Beck Ave	Hwy 12 to Cordelia	58.9	59.1	0.2	59.0	0.1	59.0	0.1
Pennsylvania St.	N. of Texas	67.2	67.9	0.7	67.7	0.5	67.7	0.4
Pennsylvania St.	Texas to Hwy 12	66.9	68.2	1.3	67.8	0.9	67.7	0.8
Pennsylvania St.	Hwy 12 to Cordelia	62.1	64.0	1.9	63.4	1.3	63.3	1.2
Jackson St	S. of Texas	61.2	61.7	0.5	61.4	0.2	61.6	0.3
Webster St.	S. of Texas	62.8	63.2	0.3	63.1	0.3	63.1	0.2
Main St.	Lotz to Cordelia	63.6	63.9	0.3	63.8	0.2	63.7	0.2
Main St.	S. of Cordelia	45.3	52.1	6.8	51.1	5.8	50.7	5.3
Civic Center Blvd	S. of Lotz	55.0	57.3	2.3	56.8	1.7	56.6	1.6
Marina Blvd	S. of Hwy 12	62.0	62.4	0.4	62.3	0.3	62.3	0.3

Bold = Significant increase in noise.

Source: FHWA-RD-77-108 with inputs from Fehr & Peers Transportation Consultants, Caltrans and j.c. brennan & associates, Inc.

Traffic Noise Levels at Proposed Residential Uses

The FHWA traffic noise prediction model was used to predict Cumulative + Project traffic noise levels at the proposed residential uses associated with the project. Table 7 shows the predicted traffic noise levels at the proposed residential uses adjacent to the major project-area arterial roadways. Table 7 also indicates the property line noise barrier heights required to achieve compliance with an exterior noise level standard of 65 dB Ldn. Appendices I and J provide the complete inputs and results to the FHWA traffic noise prediction model and barrier calculations. The modeled noise barriers assume flat site conditions where roadway elevations, base of wall elevations, and building pad elevations are approximately equivalent.

Table 7
Cumulative + Project Traffic Noise Levels At Proposed Residential Uses

Roadway	Segment	Approximate Residential Setback, feet ¹	Approximate ADT	Predicted Traffic Noise Levels, Ldn ²			
				No Wall	6' Wall	7' Wall	8' Wall
Hwy 12	Beck to Pennsylvania	100	50,060	72 dB	67 dB	66 dB	65 dB
Cordelia Road	Beck to Pennsylvania	75	18,090	67 dB	61 dB	60 dB	59 dB
Pennsylvania	Hwy 12 to Cordelia	75	12,350	66 dB	59 dB	59 dB	57 dB

¹ Setback distances are measured in feet from the centerlines of the roadways to the center of residential backyards.
² The modeled noise barriers assume flat site conditions where roadway elevations, base of wall elevations, and building pad elevations are approximately equivalent.
Source: FHWA-RD-77-108 with inputs from Fehr & Peers, Caltrans and j.c. brennan & associates, Inc.

The Table 7 data indicate that noise barriers ranging in height from 6-8 feet could be used to achieve compliance with the City of Suisun 65 dB Ldn exterior noise level standard for the proposed residential uses.

Railroad Noise Impact Assessment Methodology

Future operations along the SPRR railroad lines were not available. It is difficult to estimate the future train operation noise levels along the SPRR tracks given that the future level of activity is unknown at this time. For the purposes of this noise analysis, it was assumed that future railroad operations will be similar to those described earlier in this report. Therefore, the railroad noise monitoring results discussed earlier in this report were used to calculate the predicted railroad noise exposure at the proposed residential uses associated with the project.

All Project Alternatives:

Each of the project alternatives would create new residential uses within approximately 1200 feet of the SPRR mainline to the east. At this distance, the predicted railroad noise levels are predicted to be 59 dB Ldn. This level complies with the City of Suisun exterior noise level standard of 65 dB Ldn.

Each of the project alternatives would create new residential uses within approximately 75 feet of the SPRR spur line. At this distance, the predicted railroad noise levels are predicted to be 62 dB Ldn. This level would comply with the City of Suisun exterior noise level standard of 65 dB Ldn.

Methodology for Future Noise-Producing Uses Developed Within the Project Area

There are a variety of noise sources associated with future development within the project area which have the potential to create noise levels in excess of the applicable noise standards or result in annoyance at existing and future noise-sensitive developments within the project area.

At this time specific retailers are not known and detailed site and grading plans have not yet been developed. As a result, it is not feasible to identify specific noise impacts associated with each of the proposed uses. However, a general discussion and assessment of impacts can be conducted based upon the possible types of uses associated with the project. Following is a discussion of the potentially significant noise sources associated with the various types of proposed uses:

Supercenter:

The proposed Base Project and project Alternatives include the construction of a 227,200 sf supercenter. Noise sources associated with a supercenter store would include loading docks, delivery trucks, parking lots, HVAC equipment and an automotive center.

Home Improvement:

The proposed Base Project and Alternative 1 include a 162,700 sf home improvement store. Likely noise sources would include loading docks, delivery trucks, lumber-unloading activities, parking lots and HVAC equipment.

Various Retail Uses:

Various retail uses would include apparel, home furnishings, restaurant, fast food, gas station, and other unknown retail uses. Noise sources would likely include parking lots, delivery trucks, HVAC, and drive through lanes.

In order to assess the impacts of the proposed commercial uses on the existing and proposed residential uses, a general assessment was conducted based upon the likely commercial uses associated with the project.

Loading Dock Noise:

Due to the elevated noise emissions of heavy trucks and the common practice of utilizing loading docks during late night or early morning hours, adverse public reaction to loading dock usage is not uncommon. This is especially true if heavy trucks idle during unloading or if refrigeration trucks are parked in close proximity to residential boundaries.

Average noise levels for single idling trucks generally range from 60 to 65 dB Leq at a distance of 100 feet, and maximum noise levels associated with heavy truck passages range from 70 to 75 dB Lmax at a distance of 100 feet. Maximum noise levels generated by passages of medium duty delivery trucks generally range from 55 to 65 dB at a distance of 100 feet, depending on whether or not the driver is accelerating.

The potential for adverse noise impacts associated with loading dock usage could be reduced by restricting heavy truck arrivals or departures during the nighttime hours, by requiring that truck drivers turn off their engines while parked at the loading dock, and by requiring solid noise barriers along the side of the loading docks. It should be noted however, that such measures may not be sufficient to ensure compliance with the applicable Noise Element and Community Plan standards. Due to the potential for adverse public reaction to new loading docks in close proximity to existing residential uses, the potential noise effects associated with proposals for new loading docks should be carefully evaluated.

Based upon analyses conducted for similar supercenters and home improvement stores, an assessment of loading dock noise impacts was conducted for each of the project alternatives.

Base Project and Alternative 1:

To determine typical loading dock noise levels associated with the proposed loading docks, noise level measurement data collected for similar loading docks were used. These noise level measurements were conducted at a distance of 50 feet from the loading dock. During a one-hour sample of loading dock noise levels, there were three truck arrivals and four truck departures, and associated unloading activities.

The noise level measurements were conducted for a one-hour period, and the noise measurements of the loading dock activities were confirmed to represent a typical busy hour of loading dock operations. The results of the loading dock noise measurements indicate that a typical busy hour generated a maximum level of approximately 80 dB L_{max}, and an average noise level of 55 dB L_{eq}, at a reference distance of 50 feet.

The primary noise source associated with the loading dock areas is the heavy trucks stopping (air brakes), backing into the loading docks (back-up alarms), and pulling out of the loading docks (revving engines). If the heavy truck engines idle while the trucks are being unloaded, then this would be an additional source of noise at this location. Once the trucks have backed into the loading dock, they are unloaded from the inside of the store using a fork lift or hand cart, and most of that unloading noise is contained within the building and truck trailer.

The proposed loading dock configuration for the supercenter and home improvement store would locate the loading docks approximately 210 feet from the closest residential uses to the south or east. Using the data described above, the predicted hourly L_{eq} and L_{max} noise levels at the closest residences were calculated to be approximately 43 dB and 68 dB, respectively.

In order to assess compliance with the City of Suisun exterior noise level standards, the predicted loading dock noise levels must be converted to a L_{dn} value. To calculate the L_{dn} associated with this noise source at the closest receivers, it was assumed that the loading docks would be active for a total of five hours of the 24-hour day, including one hour during the nighttime. Therefore, the calculated L_{dn} at the closest residences to the south is approximately 41 dB. This level would comply with the City of Suisun exterior noise level standard of 65 dB L_{dn} at the nearest proposed residential uses.

Alternative 2:

Alternative 2 would place loading docks within 130 feet of the nearest residential uses to the west. Therefore, the proposed Ldn value for loading docks would be 45 dB at the nearest residential uses. This level would comply with the City of Suisun exterior noise level standard of 65 dB Ldn at the nearest proposed residential uses.

Truck Circulation Noise:

Based upon analyses conducted for similar supercenters and home improvement stores, an assessment of delivery truck circulation noise impacts was conducted for each of the project alternatives.

Base Project and Alternative 1:

At this time, the exact truck routes are not known, however, it is expected that the proposed project would place residential uses within approximately 170 feet from on-site truck circulation routes.

Based upon information for similar supercenter projects, truck activity at the proposed site would conservatively consist of approximately 12 semi-trailer truck deliveries per day. Twelve daily deliveries would result in 24 truck pass-bys when the separate arrivals and departures are considered. The truck traffic noise analysis was based on these figures and on reference noise level measurements conducted at similar commercial truck loading docks.

Truck pass-bys en route to the loading dock areas are expected to be relatively brief, and are estimated to produce an average Sound Exposure Level (SEL) of approximately 87 dB at a distance of 50 feet. The typical Lmax level due to a truck pass-by has been measured to be approximately 75 dB at a distance of 50 feet.

In order to assess compliance with the City of Suisun exterior noise level standards, the predicted loading dock noise levels must be converted to a Ldn value. The Ldn at the nearest residences resulting from truck passages would depend on the number of daily truck operations and the hours during which they occur. This is because in the calculation of Ldn, each nighttime truck passage generates the equivalent noise of 10 daytime truck deliveries (10 dB penalty for nighttime operations). Based on the assumption that one sixth of the total daily passages (2 trips) could occur during nighttime hours (10 p.m.-7 a.m.), the predicted Ldn would be approximately 44 dB Ldn at the nearest residences. This level would comply with the City of Suisun exterior noise level standard of 65 dB Ldn at the nearest proposed residential uses.

Alternative 2:

Alternative 2 would place residential uses within 50 feet of the nearest truck circulation route behind the proposed supercenter. Therefore, the proposed Ldn value for truck circulation would be 52 dB at the adjacent residential uses. This level would exceed the City of Suisun exterior noise level standard of 65 dB Ldn at the nearest proposed residential uses.

HVAC Equipment Noise

HVAC equipment for the supercenter and home improvement store will likely consists of packaged rooftop units. Cold food storage refrigeration units may also be required for the proposed supercenter use.

Base Project and Alternative 1

Based on j.c. brennan & associates experience with similar projects, the primary cooling for the proposed supercenter and home improvement store will be produced by packaged rooftop air conditioning systems. The coolers will likely be evenly distributed across the roof of the building, starting at about 30 feet in from the edges of the roof.

During the peak of summer, it is expected that air conditioning units could be in operation simultaneously during all hours of the day and night.

The roof-top air conditioning systems are predicted to produce approximately 52 dB at a reference distance of 100 feet (per unit). Mechanical equipment noise exposure was calculated assuming 22 total rooftop coolers (all operating simultaneously) and standard spherical spreading loss (-6 dB per each doubling of distance from the source). These levels were computed to be approximately 55 dB Ldn at the closest residences based on the effective noise center of the rooftop equipment being the center of the store roof, and assuming 5 dB of shielding by rooftop parapets. This level would comply with the City of Suisun exterior noise level standard of 65 dB Ldn at the nearest proposed residential uses.

To quantify the noise emissions from food cold storage refrigeration equipment, j.c. brennan & associates, Inc. utilized noise level measurements at a supercenter in Reno, Nevada. At a distance of 50 feet from these units, a noise level of 66 dB Leq was recorded. Based upon the reference levels and continuous operation, the predicted Ldn level would be 60 dB at the nearest residential uses. This level would comply with the City of Suisun exterior noise level standard of 65 dB Ldn at the nearest proposed residential uses.

Alternative 2

Utilizing the same methodology as above, the predicted HVAC noise levels at the nearest residential uses is predicted to be 58 dB Ldn. Food storage refrigeration equipment is predicted to be 64 dB Ldn at the nearest residential uses. These levels would comply with the City of Suisun exterior noise level standard of 65 dB Ldn at the nearest proposed residential uses.

Parking Lot Noise:

Parking lot noise consists of a variety of variable noise sources including vehicle circulation, vehicles starting, people conversing, doors slamming, customer unloading/loading etc.

Base Project and Alternative 2

The Base Project and Alternative 2 would include a large central parking lot north of the primary retail anchors in addition to smaller parking lots for the other various retail uses. Due to distance and shielding from intervening structures, parking lot activities are not considered to be a significant noise source to the existing or proposed residential uses in the project vicinity.

Alternative 1

Alternative 1 would place residential uses adjacent to the parking lot for the proposed retail supercenter. The residential uses would receive noise exposure from approximately half of the 1821 space parking lot for Retail uses A1 and A2. As a means of determining the noise levels due to parking lot activities, j.c. brendan & associates, Inc., utilized noise level data collected for previous parking lot studies and operations data supplied by the project traffic engineer. A typical SEL due to vehicle arrivals/departures, including doors slamming and people conversing is approximately 71 dB, at a distance of 50 feet. It is assumed that 9700 vehicles will enter and leave the parking lot on a daily basis. For the purpose of this analysis, it was conservatively assumed that the retail store would operate 24-hours per day with traffic being spread evenly during all operating hours. Parking lot noise levels were determined using the following formula.

$$Ldn = 71 + 10\log (N_{eq}) - 49.4$$

where 71 is the mean Sound Exposure Level (SEL) for an automobile operation, N_{eq} is the equivalent number of parking lot operations in a given 24-hours (N_{eq} is assumed to be 44,862 for this project after application of nighttime penalties) and 49.4 is 10 times the logarithm of the number seconds in a 24-hour period.

It is important to note that the N_{eq} applies a penalty of three times the number of operations which occur during the evening period (7 p.m. to 10 p.m.) and ten times the number of operations which occur during the nighttime period (10 p.m. - 7 a.m.).

Using the equations and operations data described above, the proposed parking lot would result in noise levels of approximately 68 dB Ldn at a distance of 50 feet. Assuming that the closest residential receivers to the north are approximately 200 feet from the center of the proposed parking lot, the predicted noise levels are 56 dB Ldn. This level would comply with the City of Suisun exterior noise level standard of 65 dB Ldn at the nearest proposed residential uses.

Automotive Tire Center Noise:

The proposed supercenter would likely include an automotive tire center. In order to estimate the noise impacts of an automotive center, data for a major tire store was utilized.

The use of air impacts wrenches would be the most significant source of noise associated with the automotive center. Based upon noise level measurements of air impact wrenches, the ½" air wrenches which are typically used for tire removal and installation typically produce a sound level of approximately 61 dB Leq and 72.8 dB SEL at a distance of 100 feet from the entrance of the tire change bays. The average duration of use is 15 seconds per wheel. In addition, each wheel involves two actions (on/off).

To determine the typical peak hour operations which may occur at the proposed automotive center an estimate of the peak hour and daily operations was obtained for a large tire shop. The usage estimate indicates that each tire bay could handle two vehicles in a busy hour. Assuming four vehicle bays operating at full capacity, the automotive center could handle a total of 8 vehicles per hour for a total of 32 wheel changes. Table 8 summarizes the Automotive Center assumptions.

Table 8							
Assumptions For Determining Peak Hour Leq Due to ½" Air Wrenches							
Location	# of Bays	Vehicles /Hr./Bay	Wheel Changes/ Vehicle	Total Wheel Changes on & off	Duration per Wheel	Sound Level Data	
						SEL at 100'	Lmax at 75'
Tire Bay	4	2	4	32	15 Sec.	72.8 dB	66.5 dB
Source: j.c. brennan & associates, Inc.							

Assuming a scenario with all bays operating at full capacity, the hourly Leq value for air wrench operations can be calculated as follows:

$$\text{Leq} = 72.8 + 10\text{Log } 32 - 35.6, \text{ dBA where:}$$

72.8 is the mean SEL of the event, 32 is the sum of the number of operations, and 35.6 is 10 times the logarithm of the number of seconds in an hour. Based upon the calculation above, the noise level due to air impact wrench use is shown in Table 9.

Assuming that the store operates for 12 hours, the Ldn can be calculated as follows:

$$\text{Ldn} = 72.8 + 10\text{Log } 384 - 49.4, \text{ dBA where:}$$

72.8 is the mean SEL of the event, 384 is the total number of operations, and 49.4 is 10 times the logarithm of the number of seconds in day. Based upon the calculations above, the noise levels due to air impact wrench operations at 100 feet are shown in Table 7.

Table 9 Predicted Air Wrench Noise Levels at a Reference Distance of 100 feet		
Activity	Peak Hour Leq	Ldn
Tire removal and installation	52 dB	49 dB
Source: j.c. brennan & associates, Inc.		

Base Project and Alternative 1

The Base Project and Alternative 1 would create new residential uses located within 250 feet of the proposed automotive center. At this distance the automotive center is predicted to generate exterior noise levels of 41 dB Ldn. This level would comply with the City of Suisun exterior noise level standard of 65 dB Ldn at the nearest proposed residential uses.

Alternative 2

Alternative 2 would create new residential uses located within 100 feet of the proposed automotive center. At this distance the automotive center is predicted to generate exterior noise levels of 49 dB Ldn. This level would comply with the City of Suisun exterior noise level standard of 65 dB Ldn at the nearest proposed residential uses.

Construction Noise Impact Assessment Methodology

During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. Activities involved in construction would generate maximum noise levels, as indicated in Table 10, ranging from 85 to 90 dB at a distance of 50 feet. Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A significant project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from construction sites. This noise increase would be of short duration, and would likely occur primarily during daytime hours.

Table 10 Construction Equipment Noise	
Type of Equipment	Maximum Level, dB at 50 feet
Bulldozers	87
Heavy Trucks	88
Backhoe	85
Pneumatic Tools	85

Source: Environmental Noise Pollution, Patrick R. Cunniff, 1977.

SPECIFIC IMPACTS AND MITIGATION MEASURES

Impact 1: Traffic Noise Level Increases at Existing Land Uses in the Project Vicinity. Existing residences located along major roadways in the vicinity of the project area will be exposed to elevated traffic noise levels under existing and cumulative buildout conditions either with or without the project. Table 5 indicates that the existing traffic noise level increases resulting from the proposed project would range from +0.2 dB to +7.2 dB Ldn, relative to no-project conditions. Table 6 indicates that the cumulative traffic noise level increases resulting from the proposed project development would range from +0.1 dB to +6.8 dB Ldn, relative to cumulative no-project noise levels.

Pursuant to the project's Significance Criteria, a significant increase in traffic noise levels is defined as 3 dB. Although the project will generate a significant amount of new vehicle trips, the new trips are generally not enough to cause a significant increase in traffic noise levels on the existing roadway network. However, a significant increase of 5.3-7.2 dB is predicted for Main Street, south of Cordelia Road under the various project alternatives. Based upon discussions with the project traffic engineer, this increase is the result of the traffic modeling process which required that a percentage of vehicle trips be distributed onto the downtown streets. However, Main Street, south of Cordelia Road is a residential court with no through connection to any other streets. Therefore, it is not anticipated that this residential court will realistically be exposed to significant increases in traffic noise levels resulting from the proposed project. Even if the project were to increase traffic on this street, absolute noise levels are predicted to be well below the City of Suisun exterior noise level standard of 65 dB Ldn. **Therefore, this impact is considered to be less than significant.**

Impact 2: Traffic Noise Impacts at Future Noise-Sensitive Land Uses Developed within the project area. Proposed residential land uses located adjacent to any of the major project-area roadways will be impacted by traffic noise. Future traffic noise levels from Highway 12, Pennsylvania Street, and Cordelia Road will exceed the 65 dB Ldn exterior noise level standard applicable to residential uses and may exceed an interior noise level standard of 45 dB Ldn.

The degree by which traffic noise levels will exceed the City of Suisun 65 dB CNEL/Ldn exterior noise level standard will depend on the proximity of the proposed noise-sensitive uses to the major roadways within the project vicinity, and the individual noise generation of those roadways. Because it is likely that residential uses will be developed within areas exposed to projected future traffic noise levels in excess of the applicable noise standards, this impact is considered significant according to the Project's Significance Criteria. **Therefore, this impact is considered potentially significant in need of mitigation.**

Mitigation for Impact 2:

Implementation of the following noise mitigation measures would reduce this impact to a *less than significant level*.

MM 2a: Sound walls should be constructed along the major project-area roadways, adjacent to proposed residential uses. The Table 7 data should be consulted to determine appropriate barrier heights. If the assumptions shown in Table 7 vary considerably, a detailed analysis of exterior and interior mitigation measures should be conducted when tentative maps become available.

MM 2b: In order to ensure compliance with an interior noise level standard of 45 dB Ldn, a detailed analysis of interior noise levels should be conducted for proposed residential uses constructed in areas with unmitigated exterior noise levels of 67 dB CNEL/Ldn or greater. This would specifically apply to proposed residential uses adjacent to SR12. This requirement is based upon an assumption of a standard exterior-to-interior noise level reduction of 25 dB provided by standard residential construction, and the fact that second floor building facades are typically exposed to noise levels 2-3 dB higher than first floor facades.

Significance after Mitigation: Less than Significant.

Impact 3: Railroad Noise Impacts at Future Noise-Sensitive Land Uses Developed within the project area. Proposed residential land uses located adjacent to the SPRR spur line are not predicted to be impacted by railroad noise. SPRR train activity is predicted to be less than the City of Suisun 65 dB Ldn exterior noise level standard applicable to residential uses. **Therefore, this impact is considered to be less than significant.**

Noise Impacts Associated with Development of Noise-Producing Uses within the Plan Area

Impact 4 Impacts of Commercial Noise Sources. As stated in the methodology section of this report, noise impacts associated with future uses developed within the Planned Retail area cannot practically be evaluated due to the wide range of variables which will affect such noise generation. However, an estimate of noise impacts can be made based upon the best available information at this. Based upon the estimates discussed in the methodology section, the proposed commercial uses are predicted to comply with an exterior noise standard of 65 dB Ldn at the nearest residential uses. However, because the CNEL/Ldn noise level standard tends to disguise short-term variations in the noise environment, there is a potential for annoyance to the adjacent residential uses. **Therefore, this impact is considered potentially significant in need of mitigation.**

Mitigation for Impact 4:

Implementation of the following noise mitigation measures would reduce this impact to a *less than significant level*.

- MM4a** The CC&R's developed for the Planned Retail area shall require all uses developed within the area to generate noise levels which comply with the City of Suisun Noise Element standards.
- MM4b** During project review, the Zoning Administer shall make a determination as to whether or not the proposed use would likely generate noise levels which could adversely affect the adjacent residential areas. If it is determined from this review that proposed uses could generate excessive noise levels at noise-sensitive uses, the applicant shall be required to prepare an acoustical analysis to ensure that all appropriate noise control measures are incorporated into the project design so as to mitigate any noise impacts. Such noise control measures include, but are not limited to, use of noise barriers, site-redesign, silencers, partial or complete enclosures of critical equipment, etc.
- MM4c** In order to minimize the risk for annoyance, buyer/renter notification should be implemented for all residential uses adjacent to commercial areas. The buyer/renter notification should inform residents that every attempt has been made to ensure compliance with the

applicable City of Suisun noise standards, however, periods of elevated noise levels may occur.

Significance after Mitigation: Less than Significant.

Impact 5: Construction Noise. Activities associated with construction will result in elevated noise levels, with maximum noise levels ranging from 85-90 dB at 100 feet, as shown in Table 10. Construction activities would be temporary in nature and would likely occur during normal daytime working hours. Nonetheless, because construction activities would result in periods of elevated noise levels, **this impact is considered potentially significant.**

Mitigation for Impact 5:

Implementation of the following noise mitigation measures would reduce this impact to a *less than significant level*.

MM 6: Construction activities should adhere to the requirements of the City of Suisun with respect to hours of operation. In addition, all equipment shall be fitted with factory equipped mufflers, and in good working order.

Significance after Mitigation: Less than Significant.



FEHR & PEERS
TRANSPORTATION CONSULTANTS

Gentry/Suisun Annexation Draft Traffic Study

February 2006

*Prepared for:
City Suisun City, CA*

TABLE OF CONTENTS

1. Executive Summary.....	8
EXISTING CONDITIONS	8
PROJECT DESCRIPTION	8
PROPOSED TRANSPORTATION IMPROVEMENTS.....	9
EXISTING PLUS PROJECT INTERSECTION IMPACTS.....	9
CUMULATIVE INTERSECTION IMPACTS	11
ROADWAY NETWORK- PROJECT IMPACTS	13
TRANSIT SYSTEM- PROJECT IMPACTS	14
BICYCLE NETWORK- PROJECT IMPACTS.....	14
PEDESTRIAN NETWORK- PROJECT IMPACTS	15
PROJECT SITE PLAN REVIEW	15
2. ANALYSIS PARAMETERS	16
PROJECT STUDY AREA.....	16
PROJECT STUDY INTERSECTIONS	16
ANALYSIS SCENARIOS.....	21
ANALYSIS METHODOLOGIES	22
SIGNIFICANCE CRITERIA	27
3. Existing Conditions	30
EXISTING ROADWAY FACILITIES	30
EXISTING BUS TRANSIT FACILITIES.....	31
EXISTING RAIL TRANSIT FACILITIES	31
BICYCLE/PEDESTRIAN NETWORK.....	31
TRAFFIC DATA COLLECTION.....	31
EXISTING INTERSECTION OPERATIONS	31
4. PROJECT Transportation Conditions.....	37
PROJECT DESCRIPTION	37
PROJECT PARCELIZATION	37
PROJECT DRIVEWAYS & ROADWAYS.....	37

PROJECT TRIP GENERATION.....	38
TRIP GENERATION REDUCTIONS.....	39
TRIP GENERATION CALCULATIONS.....	40
TRIP DISTRIBUTION.....	40
TRIP ASSIGNMENT.....	40
5. FUTURE TRANSPORTATION IMPROVEMENTS.....	58
STATE ROUTE 12 IMPROVEMENTS.....	58
SUISUN CITY ROADWAY IMPROVEMENTS.....	58
CITY OF FAIRFIELD ROADWAY IMPROVEMENTS.....	59
BICYCLE/PEDESTRIAN IMPROVEMENTS.....	59
TRANSIT IMPROVEMENTS.....	59
6. Project Intersection Impacts- Existing Plus Project scenario.....	61
TRAFFIC VOLUMES.....	61
ROADWAY IMPROVEMENTS.....	61
INTERSECTION OPERATIONS.....	61
BASE PROJECT IMPACTS AND MITIGATIONS.....	69
ALTERNATIVE 1 IMPACTS AND MITIGATIONS.....	77
ALTERNATIVE 2 IMPACTS AND MITIGATIONS.....	84
7. Project intersection impacts- Cumulative scenario.....	91
TRAFFIC VOLUMES.....	91
ROADWAY IMPROVEMENTS.....	91
INTERSECTION OPERATIONS.....	101
BASE PROJECT IMPACTS AND MITIGATIONS.....	101
ALTERNATIVE 1 IMPACTS AND MITIGATIONS.....	115
ALTERNATIVE 2 IMPACTS AND MITIGATIONS.....	129
8. roadway network- PProject impacts.....	143
PLANNED ROADWAY IMPROVEMENTS.....	143
ADOPTED PLANS AND POLICIES REGARDING ROADWAYS.....	143
CONSTRUCTION TRAFFIC IMPACT.....	144
9. Transit System- Project Impacts.....	146

DISRUPTIONS TO EXISTING TRANSIT SERVICE	146
INTERFERENCE WITH PLANNED TRANSIT SERVICES.....	147
PROJECT CONFLICTS OR CREATES INCONSISTENCIES WITH ADOPTED TRANSIT SYSTEM PLANS, GUIDELINES, POLICIES, OR STANDARDS	147
DEMAND FOR PUBLIC TRANSIT SERVICES ABOVE CAPACITY	148
10. Bicycle Network- Project Impacts	150
DISRUPTIONS TO EXISTING FACILITIES	150
PROJECT INTERFERES WITH PLANNED BICYCLE FACILITIES.....	150
PROJECT CONFLICTS WITH ADOPTED BICYCLE SYSTEM PLANS, GUIDELINES, POLICIES, OR STANDARDS.....	150
11. pedestrian Network- Project Impacts.....	152
DISRUPTIONS TO EXISTING FACILITIES	152
PROJECT INTERFERES WITH PLANNED BICYCLE FACILITIES.....	152
PROJECT CONFLICTS WITH ADOPTED PEDESTRIAN SYSTEM PLANS, GUIDELINES, POLICIES, OR STANDARDS.....	153
12. Project Site Plan Review	154
PROJECT OVERVIEW	154
PROJECT ON-SITE CIRCULATION AND ACCESS	155
ON-SITE PARKING FOR VEHICLES	157
ON-SITE PARKING FOR BICYCLES	158
ON-SITE AND OFF-SITE PEDESTRIAN CONNECTIONS	159
DELIVERY VEHICLE ACCESS AND CIRCULATION	159
ACCESS MANAGEMENT STANDARDS.....	160

APPENDICES

Appendix A- Existing Traffic Counts

Appendix B- Existing LOS Results

Appendix C- Existing Plus Approved LOS Results

Appendix D- Model Documentation

Appendix E- Cumulative Plus Project LOS Results

LIST OF FIGURES

Figure 1- Context Area.....	17
Figure 2- Project Site Plan (Base Project).....	18
Figure 3- Alternative 1 Site Plan	19
Figure 4- Alternative 2 Site Plan	20
Figure 5- Existing Roadway Network.....	25
Figure 6- Off-Site Study Intersections.....	26
Figure 7A- Existing Traffic Counts (off-site).....	34
Figure 7B- Existing Traffic Counts (on-site).....	35
Figure 8- Existing Lane Configurations.....	36
Figure 9- Project Parcels.....	41
Figure 10- Project Driveways (Base Project).....	42
Figure 11- Project Driveways (Alternative 1)	43
Figure 12- Project Driveways (Alternative 2)	44
Figure 13- Trip Distribution.....	45
Figure 14A Off-Site Intersection Assignment Base Project	49
Figure 14B- On-Site Intersection Assignment Base Project.....	50
Figure 15A- Off-Site Intersection Assignment with Alternative 1	51
Figure 15B- On-Site Intersection Assignment with Alternative 1	52
Figure 16A- Off-Site Intersection Assignment with Alternative 2	53
Figure 16B- On-Site Intersection Assignment with Alternative 2.....	54
Figure 17- Pass-By Trip Assignment (Base Project).....	55
Figure 18- Pass-By Trip Assignment (Alternative 1).....	56
Figure 19- Pass-By Trip Assignment (Alternative 2).....	57
Figure 20A- Traffic Volumes at Off-Site intersections (Base Project E+P).....	63
Figure 20B- Traffic Volumes at On-Site intersections (Base Project E+P).....	64
Figure 21A- Traffic Volumes at Off-Site intersections (Alternative 1 E+P)	65
Figure 21B- Traffic Volumes at On-Site intersections (Alternative 1 E+P).....	66
Figure 22A- Traffic Volumes at Off-Site intersections (Alternative 2 E+P)	67

Figure 22B- Traffic Volumes at On-Site intersections (Alternative 2 E+P)	68
Figure 23A- Base Project Mitigation Measures (Off-site intersections)	75
Figure 23B- Base Project Mitigation Measures (On-site intersections)	76
Figure 24A- Alternative 1 Mitigation Measures (off-site intersections)	82
Figure 24B- Alternative 1 Mitigation Measures (On-site intersections)	83
Figure 25A- Alternative 2 Mitigation Measures (Off-Site Intersections).....	89
Figure 25B- Alternative 2 Mitigation Measures (On-Site Intersections).....	90
Figure 26A- Traffic Volumes at Off-Site intersections (Background).....	92
Figure 26B- Traffic Volumes at On-Site intersections (Background).....	93
Figure 27A- Traffic Volumes at Off-Site intersections (Base Project Cumulative).....	94
Figure 27B- Traffic Volumes at On-Site intersections (Base Project Cumulative).....	95
Figure 28A- Traffic Volumes at Off-Site intersections (Alternative 1 Cumulative).....	96
Figure 28B- Traffic Volumes at On-Site intersections (Alternative 1 Cumulative).....	97
Figure 29A- Traffic Volumes at Off-Site intersections (Alternative 2 Cumulative).....	98
Figure 29B- Traffic Volumes at On-Site intersections (Alternative 2 Cumulative).....	99
Figure 30A- Base Project Improvements- Off-site intersections.....	113
Figure 30B- Base Project Improvements- On-site intersections.....	114
Figure 31A- Alternative 1 Improvements (Off-site intersections).....	127
Figure 31B- Alternative 1 Improvements (On-site intersections).....	128
Figure 32A- Alternative 2 Improvements (Off-site intersections).....	141
Figure 32B- Alternative 2 Improvements (On-site intersections).....	142

LIST OF TABLES

TABLE 1 Signalized Intersection LOS Criteria.....	23
TABLE 2 UNSIGNALIZED INTERSECTION LOS CRITERIA	24
Table 3 Existing Intersection Levels of Service	32
Table 4A- Trip Generation Calculations- Base Project	46
Table 4B- Trip Generation Calculations- Alternative 1	47
Table 4C- Trip Generation Calculations- Alternative 2	48
Table 5- Existing Plus Project LOS (All scenarios).....	62
Table 6- Cumulative LOS Results (All Scenarios)	100

1. EXECUTIVE SUMMARY

This traffic study documents the traffic impacts associated with the Gentry/Suisun Annexation, which involves the development and annexation of 172.5 acres of land from Solano County into the City of Suisun City. Development of this site will include commercial, office, light industrial and residential uses. Three alternatives have been proposed for this site, which vary by the amount of commercial and residential development. This report addresses the existing transportation conditions, provides a description of the project, and addresses project impacts. Impacts include intersections, the roadway system, transit, bicycles, and pedestrians. This report also includes a review of the project site plan.

EXISTING CONDITIONS

A review of the existing conditions addresses the existing roadways, the existing transit system, existing bike and pedestrian facilities, along with the existing intersection. The existing roadways proximate to the project site include State Route 12 (SR 12) which is a major east-west roadway in Solano County and serves both regional and local travel. Other major roadways in the study area include West Texas Street, Beck Avenue, and Pennsylvania Avenue. There is an existing transit line in the study area, although there currently are no bus stops adjacent to the project site. There are limited bicycle and pedestrian facilities within the study area. The review of existing intersection operations indicates that the following intersections operate at a deficient level, based on existing traffic counts and lane configurations:

- Texas Street/I-80 WB Ramp (PM only)
- Texas Street/Beck Avenue (PM & Saturday)
- Texas Street/Pennsylvania Avenue (PM only)
- SR 12/Beck Avenue (AM & PM)
- SR 12/Pennsylvania Avenue (AM & PM)
- SR 12/Marina Blvd (AM)
- SR 12/Sunset Avenue (Saturday)

PROJECT DESCRIPTION

The Gentry/Suisun Annexation involves the annexation of 172.5 acres of land from Solano County into the City of Suisun City. A portion of this 172.5 acres area will be developed into commercial and residential uses while the remaining areas will be maintained as farmland. Proposed development for the site will include:

- Planning Area 1- This site will contain either commercial uses or a mixture of commercial and residential uses depending on the alternative. Under the Base Project, this site would develop as a 655 KSF shopping center. Under Alternative 1, the site would develop as a 480 KSF shopping center with 120 homes on the remaining areas of the site. Under Alternative 2, this site would have a 350 KSF shopping center combined with 250 homes. Retail uses on this site will vary from large big-box retail to small shops. These residences will likely be town homes or high-density single family homes.
- Planning Area 2- Up to 275 dwelling units at 21 dwelling units per acre on a site of about 13 acres would be developed under the Base Alternative. Under Alternative 1 and 2, up to 196 dwelling units would be

built. These homes could be town homes or other forms of high density single-family homes (patio homes, zero-lot line homes, etc).

- Planning Area 3- Development on this rate would range from 84 units (Base Project) to 96 units (Alternative 1 or 2). As in Planning Area 2, these homes would develop as either town homes or high density single-family homes.
- Ardave Parcel- This parcel is less than 1 acre in site and is proposed to contain light industrial or office type uses. Approximately 16 KSF of office or light industrial uses could be developed on this site. Under the Base Project, the site would be entirely office while under Alternatives 1 and 2, the site would develop as 4 KSF of office and 12 KSF of light industrial buildings.
- Gilbert Parcel- This portion of the site is approximately 5 acres in size and would contain about 65 KSF of general retail uses or light industrial uses. Under the Base Project, this site would be developed entirely as commercial uses. Under Alternatives 1 and 2, this parcel would develop as 10 KSF of commercial and 50 KSF of light industrial.

A significant portion of the site (Planning Area 4- 70 acres) is anticipated to remain as an agricultural use. Under the Base Project configuration, the proposed project is estimated to generate 21,691 daily trips, 578 morning peak hour trips (295 inbound and 283 outbound), 2,040 afternoon peak hour trips (1,005 inbound and 1,035 outbound), and 2,654 Saturday midday peak hour trips (1,382 inbound and 1,272 outbound).

Alternative 1 is estimated to generate 16,543 daily trips, 518 morning peak hour trips (264 inbound and 254 outbound), 1,562 afternoon peak hour trips (762 inbound and 800 outbound), and 1,946 Saturday midday peak hour trips (1,015 inbound and 931 outbound).

Alternative 2 is estimated to generate 14,575 daily trips, 509 morning peak hour trips (240 inbound and 269 outbound), 1,370 afternoon peak hour trips (679 inbound and 691 outbound), and 1,662 Saturday midday peak hour trips (869 inbound and 793 outbound).

PROPOSED TRANSPORTATION IMPROVEMENTS

A review of relevant documents such as the *Solano Countywide Transportation Plan*, the *State Route 12 Major Investment Study*, the *City of Fairfield General Plan*, and the *City of Suisun City General Plan*, indicates that there are several planned roadway improvements in the study area. For instance, the SR 12 MIS identified a need to construct an interchange or grade separation at the intersection of SR 12/Pennsylvania Avenue. However, there is limited funding available to fund this improvement or other proposed improvements in the study area. This analysis therefore assumes that there are no roadway improvements, beyond those identified as project mitigation measures. There are minor transit, bicycle, and pedestrian improvements proposed in the study area, which are not anticipated to significantly effect development of the site.

EXISTING PLUS PROJECT INTERSECTION IMPACTS

The following intersections would be impacted under the Existing Plus Project Scenario:

Base Project

- Texas Street/I-80 WB Ramp
- Texas Street/Beck Avenue

- Texas Street/Pennsylvania Avenue
- SR 12/Beck Avenue
- SR 12/Pennsylvania Avenue
- SR 12/Sunset Avenue
- Cordelia Road/Pennsylvania Avenue
- Pennsylvania Avenue/Driveway #4
- Pennsylvania Avenue/Driveway #5
- Driveway #4/Internal Roadway

Alternative 1

- Texas Street/I-80 WB Ramp
- Texas Street/Beck Avenue
- Texas Street/Pennsylvania Avenue
- SR 12/Beck Avenue
- SR 12/Pennsylvania Avenue
- SR 12/Sunset Avenue
- Cordelia Road/Pennsylvania Avenue
- Pennsylvania Avenue/Driveway #4
- Pennsylvania Avenue/Driveway #5
- Driveway #4/Internal Roadway

Alternative 2

- Texas Street/I-80 WB Ramp
- Texas Street/Beck Avenue
- Texas Street/Pennsylvania Avenue
- SR 12/Beck Avenue
- SR 12/Pennsylvania Avenue
- SR 12/Sunset Avenue

- Cordelia Road/Pennsylvania Avenue
- Pennsylvania Avenue/Driveway #4
- Driveway #4/Internal Roadway

CUMULATIVE INTERSECTION IMPACTS

The following intersections would be impacted under the Base Project:

- Texas Street/I-80 WB Ramp
- Texas Street/I-80 EB Ramp
- Texas Street/Beck Avenue
- Texas Street/Pennsylvania Avenue
- Texas Street/Jackson Street
- Texas Street/Webster Street
- Woolner Avenue/Beck Avenue
- SR 12/Beck Avenue
- SR 12/Pennsylvania Avenue
- SR 12/Marina Blvd
- SR 12/Sunset Avenue
- Cordelia Road/Beck Avenue
- Cordelia Road/Pennsylvania Avenue
- Cordelia Road/Main Street
- Lotz Way/Civic Center Boulevard
- Cordelia Road/Driveway #1
- Cordelia Road/Driveway #2
- Pennsylvania Avenue/Driveway #3
- Pennsylvania Avenue/Driveway #4
- Pennsylvania Avenue/Driveway #5
- Driveway #4/Internal Roadway

The following intersections would be impacted under Alternative 1:

- Texas Street/I-80 WB Ramp
- Texas Street/I-80 EB Ramp
- Texas Street/Beck Avenue
- Texas Street/Pennsylvania Avenue
- Texas Street/Jackson Street
- Texas Street/Webster Street
- Woolner Avenue/Beck Avenue
- SR 12/Beck Avenue
- SR 12/Pennsylvania Avenue
- SR 12/Marina Blvd
- SR 12/Sunset Avenue
- Cordelia Road/Beck Avenue
- Cordelia Road/Pennsylvania Avenue
- Cordelia Road/Main Street
- Lotz Way/Civic Center Boulevard
- Cordelia Road/Driveway #1
- Cordelia Road/Driveway #2
- Pennsylvania Avenue/Driveway #3
- Pennsylvania Avenue/Driveway #4
- Pennsylvania Avenue/Driveway #5
- Driveway #4/Internal Roadway

The following intersections would be impacted by the addition of project trips under Alternative 2:

- Texas Street/I-80 WB Ramp
- Texas Street/I-80 EB Ramp
- Texas Street/Beck Avenue

- Texas Street/Pennsylvania Avenue
- Texas Street/Jackson Street
- Texas Street/Webster Street
- Woolner Avenue/Beck Avenue
- SR 12/Beck Avenue
- SR 12/Pennsylvania Avenue
- SR 12/Marina Blvd
- SR 12/Sunset Avenue
- Cordelia Road/Beck Avenue
- Cordelia Road/Pennsylvania Avenue
- Cordelia Road/Main Street
- Lotz Way/Civic Center Boulevard
- Cordelia Road/Driveway #1
- Cordelia Road/Driveway #2
- Pennsylvania Avenue/Driveway #3
- Pennsylvania Avenue/Driveway #4
- Pennsylvania Avenue/Driveway #5
- Driveway #4/Internal Roadway

ROADWAY NETWORK- PROJECT IMPACTS

Impact B-1: The project site plan does not show important cross-sectional elements such as sidewalks.

Mitigation B-1: At a minimum, the project site plan should be revised to confirm the presence or absence of sidewalks along Pennsylvania Avenue and Cordelia Road. Including sidewalks would allow Fehr & Peers to confirm that the sidewalks meet AASHTO standards. Alternately, the project applicant could prepare a cross-section for Pennsylvania Avenue and Cordelia Road to demonstrate that the major cross-section elements are consistent with AASHTO standards.

Impact after Mitigation: Less than significant

Impact B-2: Construction activities associated with this project would create a traffic impact during the construction period. Impacts would result from the import of workers to the site, the movement of heavy vehicles to the site, and the daily influx of materials to the site. Additionally, widening the adjacent roadways would

exacerbate impacts associated with the site as well as create an inconvenience for drivers using these roadways currently.

Mitigation B-2: Mitigating this impact would require the preparation of a construction traffic management plan. This plan should include the following items:

- A map documenting material and equipment staging and storage locations for all phases of construction (must be located on the project site)
- A map documenting worker parking locations for all phases of construction (must be located on the project site)
- Notification procedures for adjacent businesses, residents, property owners and public safety personnel for all major deliveries, detours, and land and/or street closures that will affect traffic in the vicinity of the project
- Provisions for monitoring surface streets used for truck routes so that any damage and debris attributable to the trucks can be identified and corrected
- Signage plans documenting any detours for bicycle and pedestrian traffic
- Routing plans for construction vehicles and construction equipment from the project site

The project applicant will develop this plan prior to the initiation of any construction activities on-site and this plan will be subject to review and approval by the City of Suisun City. It is anticipated that this Construction Traffic Management Plan will be developed in the context of a larger Construction Management Plan, which will address other issues such as hours of construction on site, limitations on noise and dust emissions, and other applicable items.

Impact after Mitigation: Less than significant

TRANSIT SYSTEM- PROJECT IMPACTS

Impact C-1: Construction activities along Pennsylvania Avenue can disrupt operation of the Route 5 bus. The roadway construction activities are likely to create delay for transit vehicles along Pennsylvania Avenue. It is anticipated that this impact will be temporary and will only occur while Pennsylvania Avenue is reconstructed.

Mitigation C-1: The project's construction traffic management plan, discussed in Mitigation B-3 should include a provision that the project applicant notify and coordinate construction activities along Pennsylvania Avenue with the Fairfield/Suisun Transit System.

Impact After Mitigation: Less than significant

BICYCLE NETWORK- PROJECT IMPACTS

Impact D-1: The project site plan does not explicitly include any bicycle facilities either within the site or along the perimeter of the site.

Mitigation D-1: The project site plan should be revised to indicate bicycle facilities. Possible options include an off-street path along Pennsylvania Avenue or including in-street bicycle lanes on Pennsylvania Avenue and Cordelia Road.

Impact After Mitigation: Less than significant

PEDESTRIAN NETWORK- PROJECT IMPACTS

Impact E-1: The project site plan does not provide pedestrian facilities on Pennsylvania Avenue.

Mitigation E-1: Revise the project site plan to include pedestrian facilities on Pennsylvania Avenue.

Impact After Mitigation: Less than significant

PROJECT SITE PLAN REVIEW

Impact F-1: The project site plan provides an adequate internal roadway network, lacks dead-end drive aisles, and provides sufficient capacity internally. Additionally, the project driveways operate at acceptable levels, with the proposed changes identified in the intersection analysis. Given these considerations, it can be concluded that the project site plan provides generally acceptable on-site circulation and access. The project site plan does not address on-site traffic control and several of the internal driveways are spaced closer than 150 feet. Therefore, a significant traffic impact occurs.

Mitigation F-1: Revise the project site plan to indicate traffic control devices on the internal roadways. Concurrently, revise the project site plan to provide the necessary turn lanes at the major internal intersection, project driveways, and to provide at least 150 feet of separation between driveways along the internal roadway.

Impact After Mitigation: Less than significant

Impact F-2: The project site plan does not provide any bicycle parking facilities; therefore a significant impact occurs. This absence of bicycle parking facilities conflicts with the requirement of the Municipal Code identified above.

Mitigation F-2: Revise the project site plan to include bicycle parking facilities.

Impact After Mitigation: Less than significant

Impact F-3: The project site plan does not provide pedestrian connections to an adjacent street (Pennsylvania Avenue); therefore a significant traffic impact occurs.

Mitigation F-3: Revise the project site plan to indicate pedestrian connections to adjacent streets with a focus on Pennsylvania Avenue.

Impact After Mitigation: Less than significant

Impact F-4: Signage and landscaping adjacent to the project site could obstruct sight distance at the project driveways.

Mitigation F-4: Revise project site plan to indicate any applicable restrictions on visually obstructive signage and landscaping at driveway locations.

Impact After Mitigation: Less than significant

2. ANALYSIS PARAMETERS

This chapter outlines the geographic scope of the transportation including the study intersections and roadways along with the analysis methodologies and significance criteria employed in this study.

PROJECT STUDY AREA

As shown in Figure 1, the project is located in southern Solano County, near the cities of Fairfield and Suisun City. The project site borders on the western edge of Suisun City and is proposed to be annexed into the city prior to development of the site.

Given the location of this project, the study area for the project includes the major roadways proximate to the site. These roadways include State Route 12 (SR 12), Pennsylvania Avenue, West Texas Street, Beck Avenue, Cordelia Road, and Marina Way. The project site is located approximately 1 mile from Interstate 80 to the north and east and is also 1 mile from the downtown Suisun City area.

The proposed project site plans are shown on Figure 2 (Base Project), Figure 3 (Alternative 1), and Figure 4 (Alternative 2).

PROJECT STUDY INTERSECTIONS

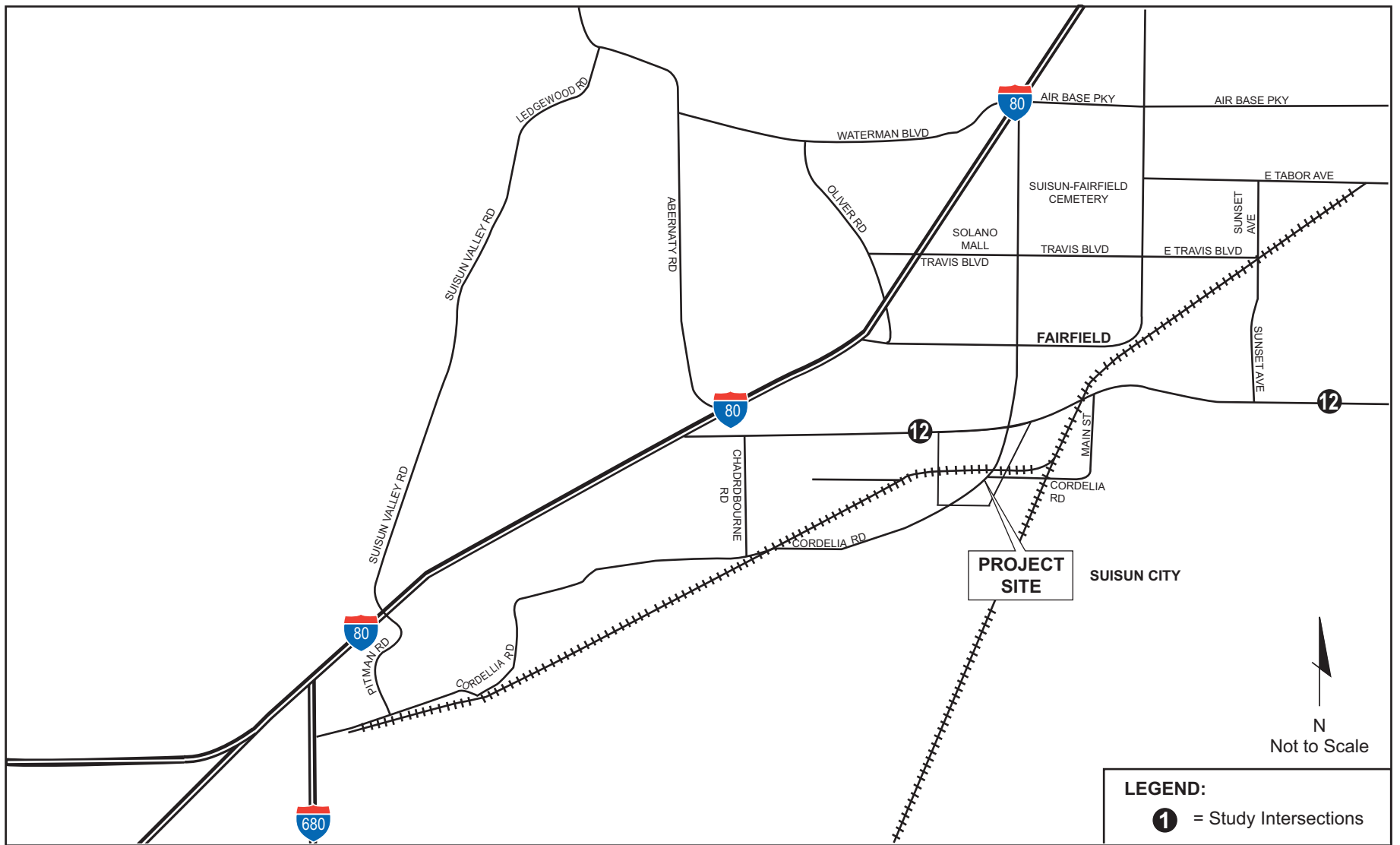
Within the larger study area, sixteen external study intersections were selected for detailed analysis. These intersections were selected because of their proximity to the project site and also based on Notice of Preparation (NOP) comments from the City of Fairfield. The City of Fairfield requested that the traffic analysis for this project address the following roadways:

- Beck Avenue
- Pennsylvania Avenue
- West Texas Street

The project study intersections were confirmed through a screening analysis, which utilized the currently adopted Solano Transportation Authority (STA) travel demand model. Through this process, the anticipated development of the site was input into the STA model and new forecasts were generated. The difference between the model volumes without the model and those with the model were noted. All of the selected intersections were located along roadways where the project causes an increase of 5 percent or more in the total roadway volumes. Please note that list of intersections includes only major intersections and gateways to the project study area along major approach and departure routes to the project site. The study intersections were also confirmed through discussions with the City staff at Suisun City.

The sixteen intersections analyzed in this EIR include:

1. Texas Street/I-80 WB Ramp
2. Texas Street/I-80 EB Ramp
3. Texas Street/Beck Avenue
4. Texas Street/Pennsylvania Avenue



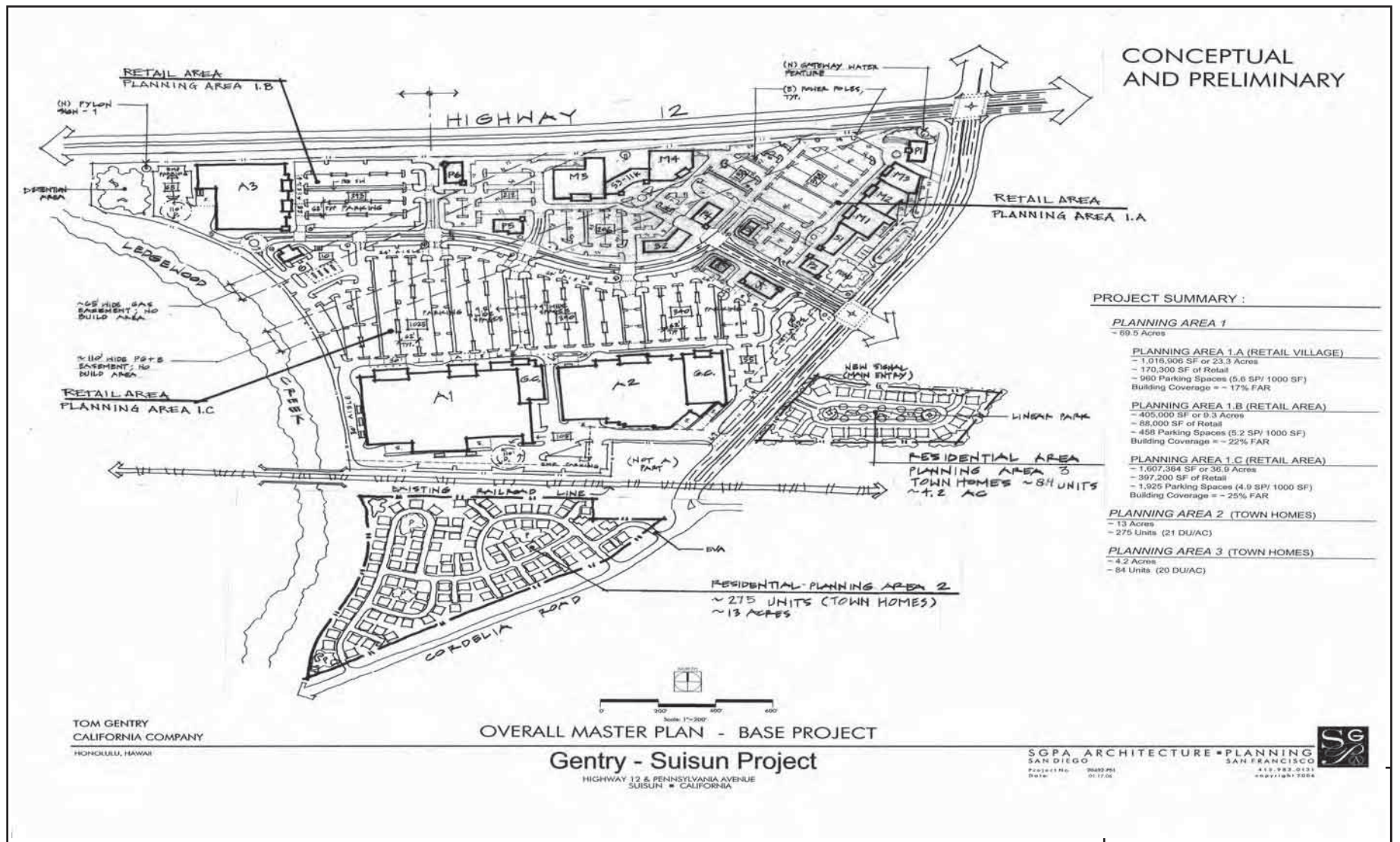
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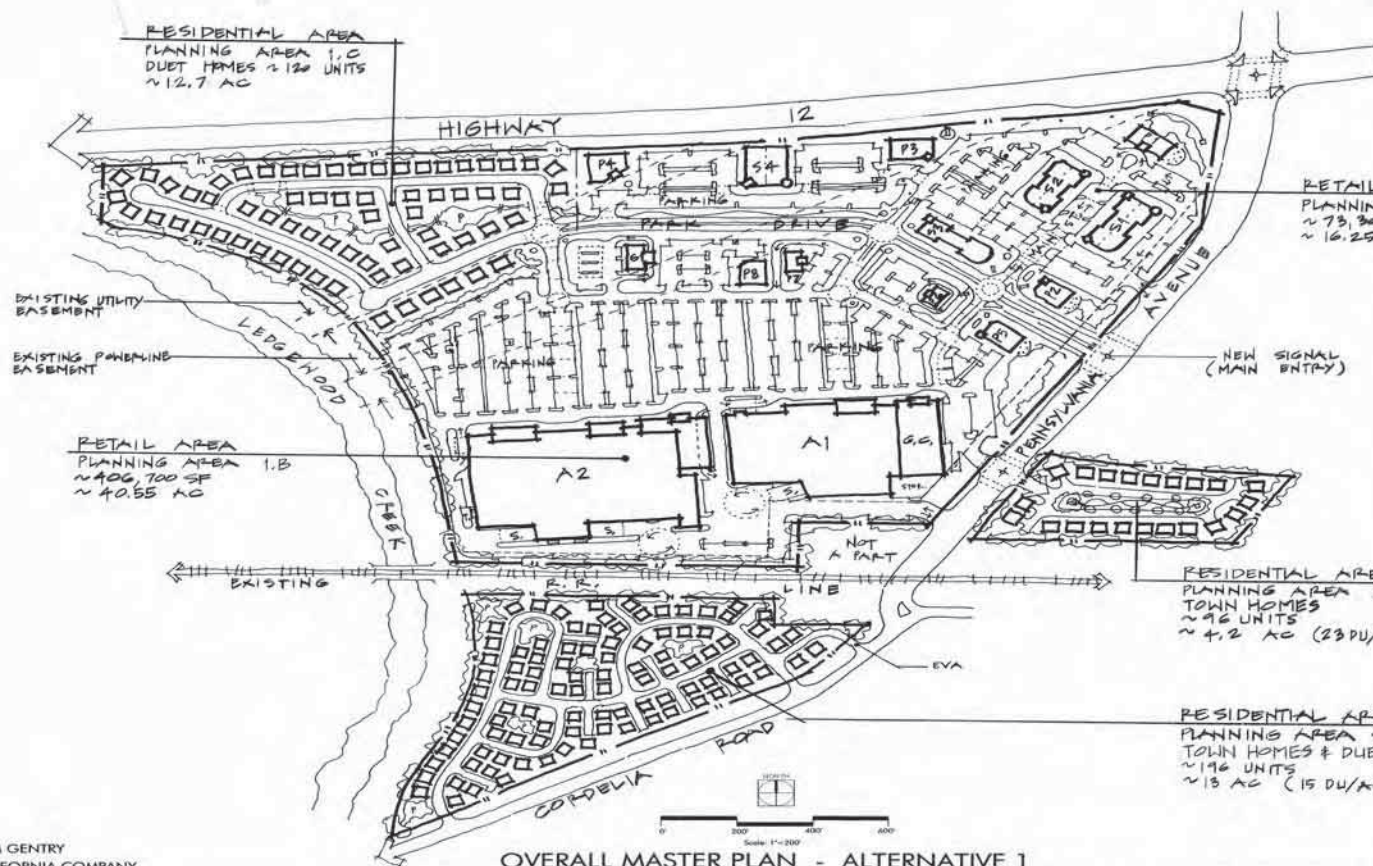
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PROJECT SITE LOCATION

FIGURE 1



CONCEPTUAL AND PRELIMINARY



RETAIL AREA
PLANNING AREA 1.A
 ~ 73,300 SF
 ~ 16.25 AC

PROJECT SUMMARY :

- PLANNING AREA 1**
- 69.5 Acres
- PLANNING AREA 1.A (RETAIL VILLAGE)**
- 708,024 SF or 16.25 Acres
- 73,300 SF of Retail
- 440 Parking Spaces (6.0 SP/ 1000 SF)
Building Coverage = ~10.4% FAR
- PLANNING AREA 1.B (RETAIL AREA)**
- 1,766,358 SF or 40.55 Acres
- 406,700 SF of Retail
- 1821 Parking Spaces (5.0 SP/ 1000 SF)
Building Coverage = ~23.0% FAR
- PLANNING AREA 1.C (DUET HOMES)**
- 12.7 Acres
- 120 Units (6-10 DU/AC)
- PLANNING AREA 2 (DUET HOMES)**
- 13 Acres
- 196 Units (15 DU/AC)
- PLANNING AREA 3 (TOWN HOMES)**
- 4.2 Acres
- 96 Units (23 DU/AC)

RESIDENTIAL AREA
PLANNING AREA 1.C
 DUET HOMES ~ 120 UNITS
 ~ 12.7 AC

RETAIL AREA
PLANNING AREA 1.B
 ~ 406,700 SF
 ~ 40.55 AC

RESIDENTIAL AREA
PLANNING AREA 3
 TOWN HOMES
 ~ 96 UNITS
 ~ 4.2 AC (23 DU/AC)

RESIDENTIAL AREA
PLANNING AREA 2
 TOWN HOMES & DUET HOMES
 ~ 196 UNITS
 ~ 13 AC (15 DU/AC)

TOM GENTRY
 CALIFORNIA COMPANY
 HONOLULU, HAWAII

OVERALL MASTER PLAN - ALTERNATIVE 1

Gentry - Suisun Project

HIGHWAY 12 & PENNSYLVANIA AVENUE
 SUISUN, CALIFORNIA

SGPA ARCHITECTURE • PLANNING
 SAN DIEGO SAN FRANCISCO
 771 EAST 11TH 36001 P.O. 413, 94133-5133
 TEL: 619.441.1100 FAX: 619.441.1100



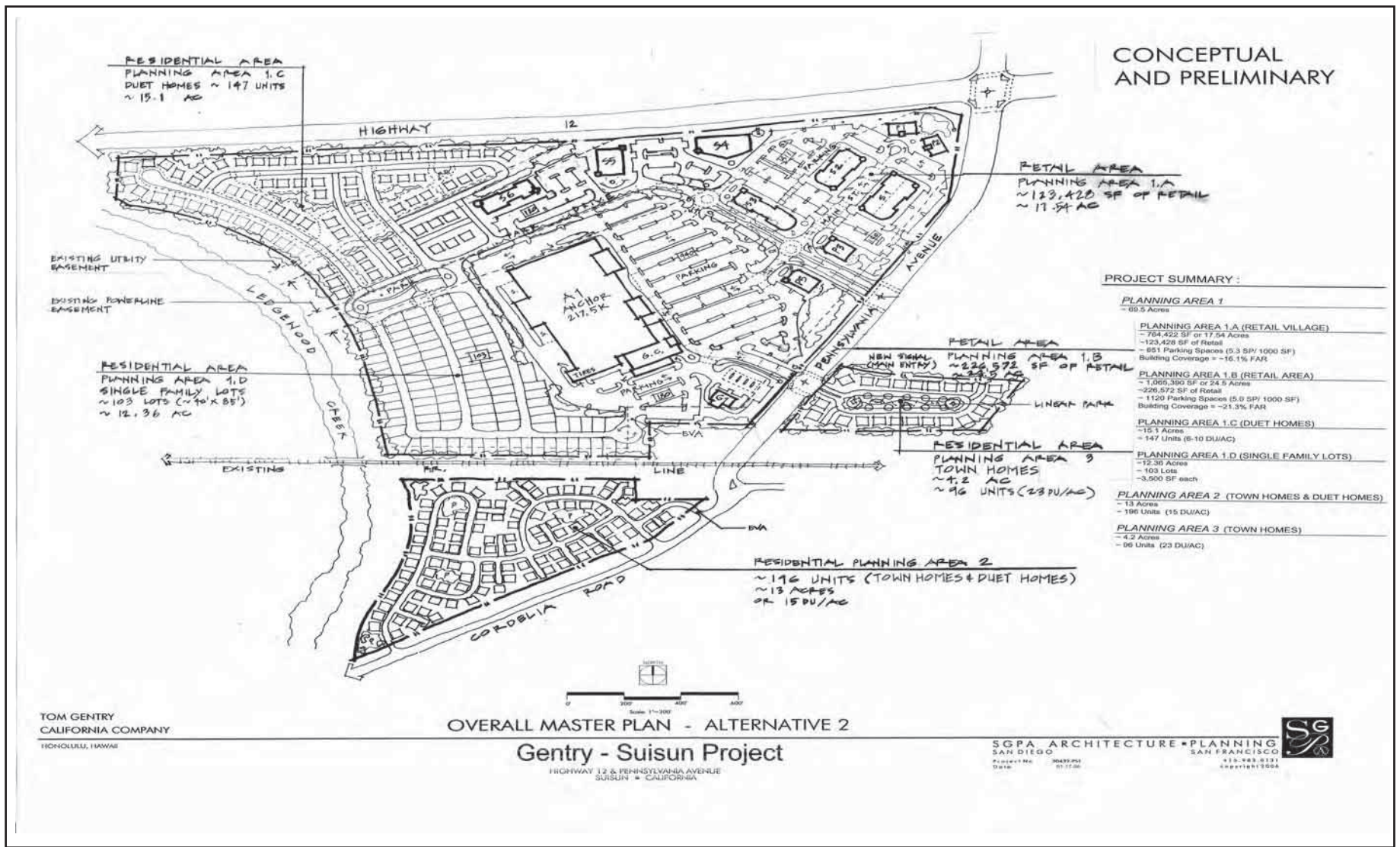
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PROJECT SITE PLAN - ALTERNATIVE 1

FIGURE 3



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PROJECT SITE PLAN - ALTERNATIVE 2

FIGURE 4

5. Texas Street/Jackson Street
6. Texas Street/Webster Street
7. Woolner Avenue/Beck Avenue
8. SR 12/Beck Avenue
9. SR 12/Pennsylvania Avenue
10. SR 12/Marina Boulevard
11. SR 12/Sunset Avenue
12. Cordelia Road/Beck Avenue
13. Cordelia Road/Pennsylvania Avenue
14. Cordelia Road/Main Street
15. Lotz Way/Civic Center Boulevard
16. Lotz Way/Main Street

The existing roadway network is shown on Figure 5. The location of these sixteen off-site study intersections is shown on Figure 6.

Additionally, six other locations were studied in this traffic analysis. These seven locations include five project driveways on Pennsylvania Avenue as well as a major internal intersection within the project site. These locations include:

1. Driveway #1/Cordelia Road
2. Driveway #2/Cordelia Road
3. Driveway #3/ Pennsylvania Avenue
4. Driveway #4/Pennsylvania Avenue (Main Project Entrance)
5. Driveway #5/Pennsylvania Avenue
6. Driveway #4/Internal Roadway

The location of these driveways and intersections are discussed further in the chapter addressing the project site plan and the project transportation characteristics.

ANALYSIS SCENARIOS

Three variants of the project site plan are proposed. These variants include the Base Project, Alternative 1, and Alternative 2. These alternatives differ based on the size of the commercial and residential component. The traffic analysis also addresses both existing and future (Cumulative) conditions. The following scenarios are analyzed in this study:

1. Existing traffic conditions
2. Existing plus Base Project
3. Existing plus Alternative 1
4. Existing plus Alternative 2
5. Cumulative
6. Cumulative plus Base Project
7. Cumulative plus Alternative 1
8. Cumulative plus Alternative 2

ANALYSIS METHODOLOGIES

The traffic study includes both signalized and unsignalized intersections, which will be analyzed using methodologies developed by the Transportation Research Board.

Signalized Intersections

Signalized intersection operations are evaluated using methodologies provided in the 2000 Highway Capacity Manual (HCM) (Transportation Research Board). These methodologies assess average control delays and then assign a corresponding letter grade that represents the overall condition of the intersection. These grades range from level of service (LOS) A (minimal delay) to LOS F (excessive congestion). Descriptions of the LOS letter grades for signalized intersections are provided in Table 1.

**TABLE 1
SIGNALIZED INTERSECTION LOS CRITERIA**

Level of Service	Description	Average Control Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10.0 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20.0 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35.0 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	> 55.0 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	> 80.0

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

Levels of service are calculated using Synchro 6.0 software, which implements 2000 HCM methodologies. Synchro software allows the input of signal timing and coordination data to more accurately reflect actual conditions. Delay and the resulting LOS is based on total intersection operations. Individual movements through the intersection will have varying levels of delay due to unique conditions affecting each movement.

Unsignalized Intersections

Unsignalized intersection levels of service are analyzed using Traffix for Windows software, which implements the 2000 HCM methodologies. Please note that delay is calculated for movements that operate under traffic control. Therefore, the delay value at side-street stop-controlled intersections reflects only the delay accruing for vehicles that are stopping at the stop sign. The LOS ranges for unsignalized intersections are shown in Table 2.

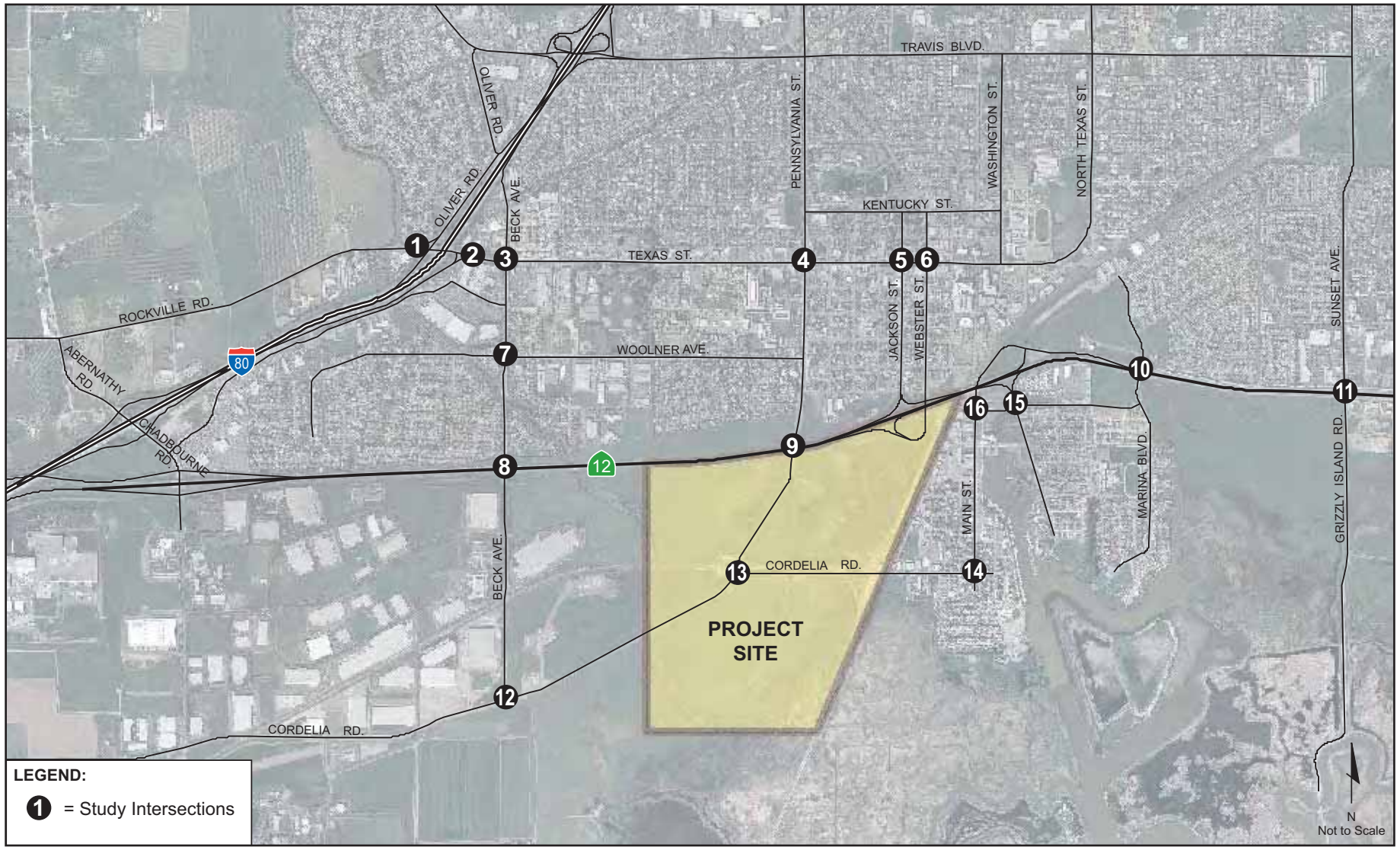
**TABLE 2
UNSIGNALIZED INTERSECTION LOS CRITERIA**

Level of Service	Description	Average Control Per Vehicle (Seconds)¹
A	Little or no delays	≤ 10.0
B	Short traffic delays	> 10.0 to 15.0
C	Average traffic delays	> 15.0 to 25.0
D	Long traffic delays	> 25.0 to 35.0
E	Very long traffic delays	> 35.0 to 50.0
F	Extreme traffic delays with intersection capacity exceeded	> 50.0

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



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EXISTING INTERSECTION LOCATIONS

FIGURE 6



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 2192-6

SIGNIFICANCE CRITERIA

The following significance criteria will be employed to determine if the project causes significant traffic impacts, based on the results of the traffic study.

1. A project, including project driveways, will disrupt existing traffic operations. Traffic operations will be assessed using both quantitative (Level of Service (LOS)) and qualitative criteria. LOS should be evaluated using methodologies documented in the 2000 Highway Capacity Manual. A disruption of traffic operations is defined as any of the following:
 - a. If the addition of project traffic causes the LOS to degrade from LOS of A, B, or C to LOS D, E, or F at a signalized intersection under the jurisdiction of Suisun City under either the existing or cumulative condition
 - b. If the addition of project traffic causes a three percent or more increase in traffic volumes (with project as compared to no project) at a signalized intersection under the jurisdiction of Suisun City that operates at LOS D, E, or F under either the existing or cumulative condition no project condition
 - c. If the addition of project traffic causes the LOS to degrade from LOS of A, B, C, or D to LOS E or F at a signalized intersection under the jurisdiction of the City of Fairfield under either the existing or cumulative condition
 - d. If the addition of project traffic causes a three percent or more increase in traffic volumes (with project as compared to no project) at a signalized intersection under the jurisdiction of the City of Fairfield that operates at LOS E or F under either the existing or cumulative condition no project condition
 - e. If the addition of project traffic causes the LOS to degrade from an acceptable LOS of A, B, or C to LOS D, E or F at a signalized intersection under the jurisdiction of the California Department of Transportation (Caltrans) under either the existing or cumulative condition no project condition
 - f. If the addition of project traffic causes a three percent or more increase in traffic volumes (with project condition as compared to no project condition) at a signalized intersection under the jurisdiction of the California Department of Transportation (Caltrans) that operates at LOS D, E or F under either the existing or cumulative condition no project condition
 - g. If the addition of project traffic causes an unsignalized intersection under the jurisdiction of Suisun City to degrade from LOS A, B, or C to LOS D, E, F and one or more traffic signal warrants (as defined by the Manual of Uniform Traffic Control Devices (MUTCD)) are met
 - h. If the addition of project traffic causes an unsignalized intersection under the jurisdiction of the City of Fairfield to degrade from LOS A, B, C, or D to LOS E or F and one or more traffic signal warrants (as defined by the Manual of Uniform Traffic Control Devices (MUTCD)) are met
 - i. If the addition of project traffic causes an unsignalized intersection under the jurisdiction of Caltrans to degrade from LOS A, B, C, to LOS D, E or F and one or more traffic signal warrants (as defined by the Manual of Uniform Traffic Control Devices (MUTCD)) are met

- j. If the addition of project traffic adds 10 or more trips to an unsignalized intersection under the jurisdiction of Suisun City that operates at LOS D, E, or F without project traffic and one or more traffic signal warrants (as defined by the Manual of Uniform Traffic Control Devices (MUTCD)) are met
 - k. If the addition of project traffic adds 10 or more trips to an unsignalized intersection under the jurisdiction of the City of Fairfield that operates at LOS E or F without project traffic and one or more traffic signal warrants (as defined by the Manual of Uniform Traffic Control Devices (MUTCD)) are met
 - l. If the addition of project traffic adds 10 or more trips to an unsignalized intersection under the jurisdiction of Caltrans that operates at LOS D, E, or F without project traffic and one or more traffic signal warrants (as defined by the Manual of Uniform Traffic Control Devices (MUTCD)) are met
 - m. A project interferes with, conflicts with or precludes other planned improvements such as roadway extensions/expansions, planned trail facilities, proposed creek restoration projects, etc.
 - n. A project conflicts or creates inconsistencies with adopted traffic plans, guidelines, policies or standards.
 - o. The construction of a project creates a temporary but prolonged impact due to lane closures, need for temporary signals, emergency vehicles access, traffic hazards to bikes/pedestrians, damage to roadbed, truck traffic on roadways not designated as truck routes, etc.
2. Transit impacts are considered significant if:
- a. A project or project-related mitigation disrupts existing transit services or facilities. This includes disruptions caused by proposed-project driveways on transit streets and impacts to transit stops/shelters; and impacts to transit operations from traffic improvements proposed or resulting from a project.
 - b. A project interferes with planned transit services or facilities.
 - c. A project conflicts or creates inconsistencies with adopted transit system plans, guidelines, policies or standards.
 - d. A project creates demand for public transit services above the capacity which is provided, or planned.
3. Bicycle impacts are considered significant if:
- a. A project disrupts existing bicycle facilities.
 - b. A project interferes with planned bicycle facilities. This includes failure to dedicate right-of-way for planned on- and off-street bicycle facilities included in an adopted Bicycle Master Plan or to contribute toward construction of planned bicycle facilities along the project's frontages.
 - c. A project conflicts or creates inconsistencies with adopted bicycle system plans, guidelines, policies or standards.
4. Pedestrian impacts are considered significant if:

- a. A project disrupts existing pedestrian facilities. This can include adding new vehicular, pedestrian or bicycle traffic to an area experiencing pedestrian safety concerns such as an adjacent crosswalk or school, particularly if the added traffic reduces the number of pedestrian acceptable gaps at un-signalized crossings or cause queues to spillback through pedestrian crossings.
 - b. A project interferes with planned pedestrian facilities. In existing and/or planned urbanized areas, main streets or pedestrian districts, this can include impacts to the quality of the walking environment.
 - c. A project conflicts or creates inconsistencies with adopted pedestrian system plans, guidelines, policies or standards.
5. Project site plans and proposed off-site improvements, including mitigation, should be reviewed for consistency with local design standards, parking codes, and other adopted guidelines. Project impacts should be considered significant if:
- a. Project designs for on-site circulation, access and parking areas fail to meet industry standard design guidelines.
 - b. A project fails to provide a sufficient quantity of on-site parking for vehicles.
 - c. A project fails to provide a sufficient quantity of on-site parking for bicycles.
 - d. A project fails to provide accessible and safe pedestrian connections between buildings and to adjacent streets and transit facilities.
 - e. A project fails to provide adequate accessibility for service and delivery trucks on-site including access to truck loading areas.
 - f. A project violates access management standards (e.g., driveway spacing, signal spacing, sight distance, etc.) in a way that causes an adverse effect on the environment or reduction in public safety

3. EXISTING CONDITIONS

This chapter discusses the existing transportation conditions in the project study area. This discussion addresses the roadway network, the bus and rail transit network, the existing bicycle and pedestrian facilities along with the traffic counts and intersection operations analysis for the existing conditions.

EXISTING ROADWAY FACILITIES

Interstate 80 (I-80) is a major east-west interstate freeway originating from the San Francisco Bay Area and continuing east towards Sacramento, terminating in New Jersey. Near the project study area, I-80 align in a southwest-to-northeast direction and provides four mixed-flow lanes in each direction with a posted speed limit of 65 mph. Major interchanges near the study area are State Route 12 (SR 12), Air Base Parkway and Alamo Drive. Access to the project site is provided via an interchange at Texas/Rockville Road and Highway 12.

State Route 12 (SR 12) is an east-west state highway, also called Rio Vista Road, extends from State Route 99 in Lodi to a junction with State Route 1 near Bodega Bay in Sonoma County. Near the project study area, SR 12 is a four lane expressway with infrequent signals and a 50 mph speed limit. West of the project study area, SR 12 joins I-80 for a segment of approximately one mile before splitting off to the northwest and traveling towards Napa County. SR 12 serves as an important commute route between I-80 and Suisun City and provides access to the Sacramento-San Joaquin River Delta. Access to the site is provided via an intersection of Pennsylvania and Highway 12.

Pennsylvania Avenue is a north-south two-lane major arterial between Cordelia Road and SR 12 where the project site is located. The posted speed limit along the section is 40 mph. From SR 12 to Gateway Boulevard, Pennsylvania Avenue is a four-lane facility with a posted speed limit of 30 mph. Pennsylvania Avenue provides interchangeable access between Suisun City and Fairfield in a north-south direction.

West Texas Street is an east-west major arterial providing access from Downtown Fairfield to I-80. West of I-80, Texas Street becomes Rockville Road. East of I-80, Texas Street is a four-lane facility with a two-way-left-turn (TWLT) lane. The posted speed limited along this section is 35 mph. East of Pennsylvania Avenue, West Texas Street becomes a two-lane facility, which on-street parking is allowable on both sides. West Texas Street makes a 90-degree turn after running pass downtown Fairfield and becomes North Texas Street.

Beck Avenue is a north-south minor arterial connecting Texas Street to Cordelia Road and running parallel to Pennsylvania Avenue. Beck Avenue also provides an eastbound on-ramp to I-80 at its northern end. Beck Avenue intersects Cordelia Road at its south end with a stop control on Beck Avenue. The posted speed limit is 35 mph.

Cordelia Road is a two-lane east-west minor arterial located south of the project site. The posted speed limit is 45 mph. To the west, Cordelia Road terminates at Lopes Road near the I-80/I-680 interchange. Cordelia Road travels along the southern edge of the City of Fairfield and then travels east to Suisun City.

Jackson Street is a north-south minor arterial connecting Highway 12 and Kentucky Street in Fairfield. It provides direct access for westbound traffic on Highway 12 to Downtown Fairfield, and vice versa. The posted speed limit is 25 mph. On-street parking and sidewalks are provided on both sides of the street.

Webster Street is a north-south minor arterial connecting Highway 12 and Kentucky Street in Fairfield. It provides direct access for eastbound traffic on Highway 12 to Downtown Fairfield, and vice versa. The posted speed limit is 25 mph. On-street parking and sidewalks are provided on both sides of the street.

EXISTING BUS TRANSIT FACILITIES

Bus transit service in the project study area is provided by the Fairfield/Suisun Transit System. No bus service is provided to the site at this time. However, the Route 5 Bus does pass along a portion of the project frontage along Pennsylvania Avenue. This line serves major destinations such as the Solano Mall, the Amtrak/Greyhound station in Suisun City, and the Suisun City Park-And-Ride facility. On the weekdays, service is offered from approximately 7 AM to 7:30 PM with 30 minute headways while weekend service begins at 9 AM and continues to 5 PM with one hour headways.

EXISTING RAIL TRANSIT FACILITIES

Commuter rail service in the study area is provided by the Capital Corridor Joint Powers Authority (CCJPA). The Capital Corridor Joint Powers Authority (CCJPA) is a partnership among the six local transit agencies in the eight county service area (Placer, Sacramento, Yolo, Solano, Contra Costa, Alameda, San Francisco, and Santa Clara), which shares the administration and management of the Capitol Corridor. The nearest Capital Corridor station to the project site is located one mile from the project site along Main Street south of Lotz Way in Suisun City. The CCJPA operates 24 passenger trains per day along this line with 12 eastbound and 12 westbound trains. Service at the Fairfield/Suisun City station begins at 5 AM and ends at 9:30 PM.

BICYCLE/PEDESTRIAN NETWORK

Given that the project site is currently vacant, there are no bicycle or pedestrian facilities located along the project boundary. There are bicycle and pedestrian facilities located throughout the project study area. For example, several of the study area roadways, such as Pennsylvania Avenue have sidewalks located away from the project site. There is a Class I Bicycle Route (off-street facility) located west of the project site along SR 12. This facility extends from Marina Boulevard to Walters Road, a distance of 2.7 miles.

TRAFFIC DATA COLLECTION

Traffic counts within at the sixteen existing study intersections were collected in a period extending from 2002 to 2005. Traffic counts were obtained from previous Fehr & Peers studies, including the I-80/I-680/SR 12 interchange study, and from previous work done by TJKM. Additional counts were conducted by Fehr & Peers in April and May of 2005. Traffic count data was collected from 7:00 to 9:00 AM and 4:00 to 6:00 PM on a weekday and from 12:00 to 2:00 PM on a Sunday. The highest one hour of traffic was selected from each two-hour period. The peak hour traffic counts at each study intersection are shown on Figures 7A (off-site intersections) 7B (project driveways). The existing lane configurations are shown on Figure 8. The traffic counts are provided as Appendix A.

EXISTING INTERSECTION OPERATIONS

The existing intersection LOS results are shown on Table 3, which provides the LOS for the AM, PM, and Saturday peak hour periods. The existing LOS results are provided in Appendix B.

**TABLE 3
EXISTING INTERSECTION LEVELS OF SERVICE**

Intersection	Jurisdiction	Traffic Control	Peak Hour	Average Intersection Delay ¹	LOS ²
Texas St/I-80 WB Ramp	Caltrans	Signal	AM PM SAT	32 48 31	C D C
Texas St/I-80 EB Ramp	Caltrans	Signal	AM PM SAT	29 30 24	C C C
Texas St/Beck Ave	Caltrans	Signal	AM PM SAT	29 42 37	C D D
Texas St/Pennsylvania Ave	Fairfield	Signal	AM PM SAT	32 57 35	C E D
Texas St/Jackson St	Fairfield	Signal	AM PM SAT	13 16 16	B B B
Texas St/Webster St	Fairfield	Signal	AM PM SAT	16 17 16	B B B
Woolner Ave/Beck Ave	Fairfield	Signal	AM PM SAT	21 14 16	C B B
SR 12/Beck Ave	Caltrans	Signal	AM PM SAT	56 52 30	E D C
SR 12/Pennsylvania Ave	Caltrans	Signal	AM PM SAT	44 43 27	D D C
SR 12/Marina Blvd	Caltrans	Signal	AM PM SAT	40 24 18	D C B
SR 12/Sunset Ave	Caltrans	Signal	AM PM SAT	40 31 38	D C D
Cordelia Rd/Beck Ave	Fairfield	TWSC	AM PM SAT	10 12 9	B B A
Cordelia Rd/Pennsylvania Ave	Fairfield	TWSC	AM PM SAT	10 12 10	B B B
Cordelia Rd/Main St	Fairfield	All-way	AM PM SAT	7 9 8	A A A
Lotz Way/Civic Center Blvd	Caltrans	All-way	AM PM SAT	8 10 11	A B B
Lotz Way/Main St	Suisun City	Signal	AM PM SAT	13 12 9	B B A

Notes:

Deficient intersections shown in **Bold**

¹ Delay and LOS shown for two-way stop controlled intersections represent worst-case stop-controlled street approach.

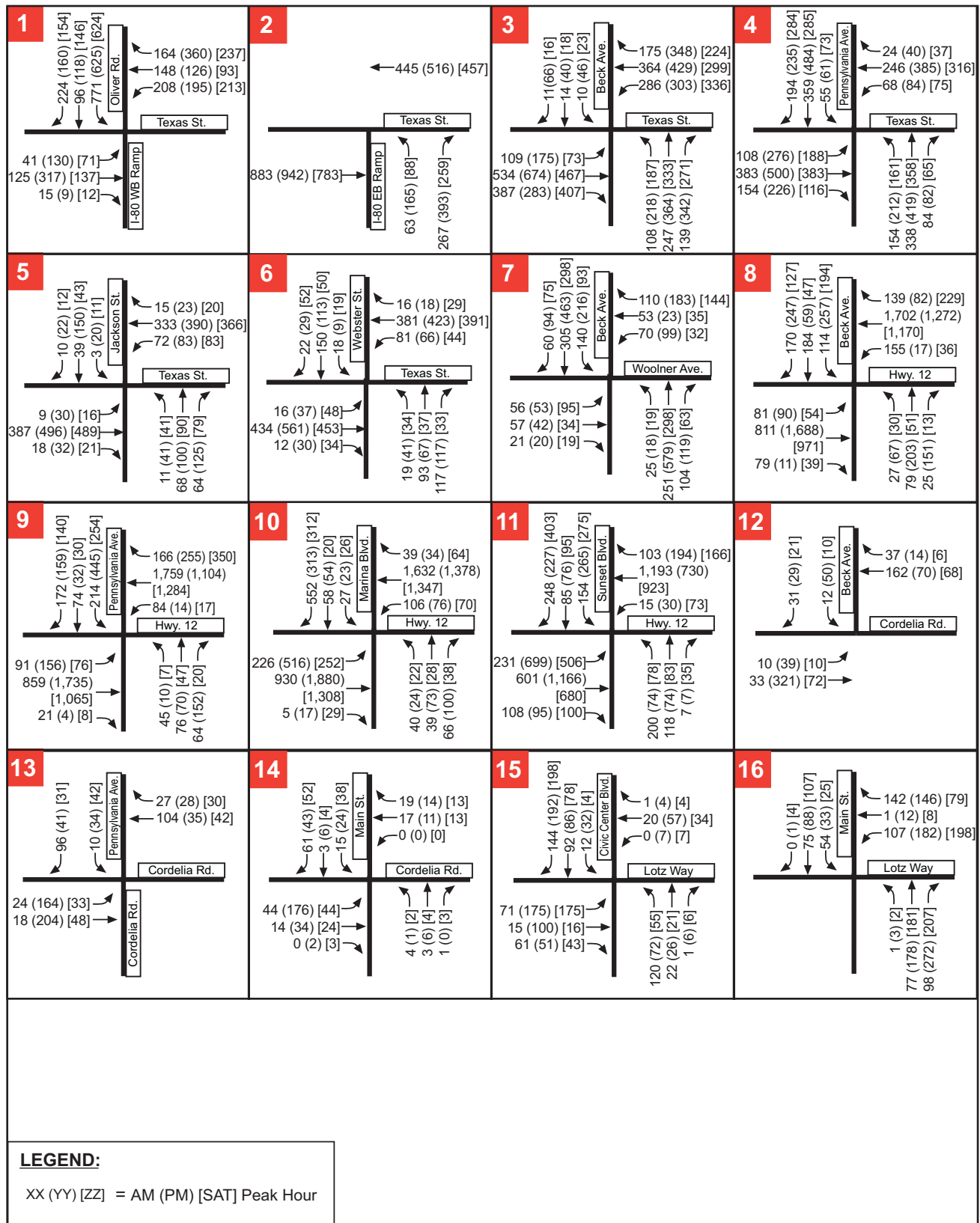
² LOS calculations performed using the 2000 Highway Capacity Manual

TWSC=Two-Way Stop Control , All-way= All-Way Stop Control

AM = AM Peak Hour; PM = PM Peak Hour

As shown in Table 3, there are seven intersections which current operate at a deficient level. These intersections include:

- Texas Street/I-80 WB Ramp (PM only)
- Texas Street/Beck Avenue (PM & Saturday)
- Texas Street/Pennsylvania Avenue (PM only)
- SR 12/Beck Avenue (AM & PM)
- SR 12/Pennsylvania Avenue (AM & PM)
- SR 12/Marina Blvd (AM)
- SR 12/Sunset Avenue (Saturday)



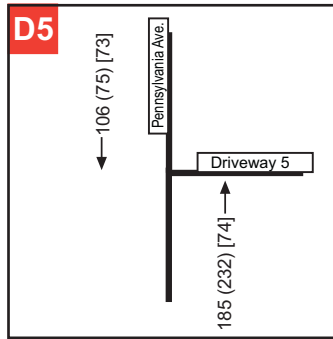
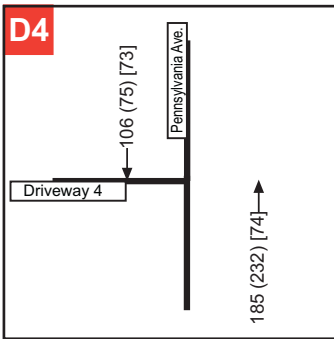
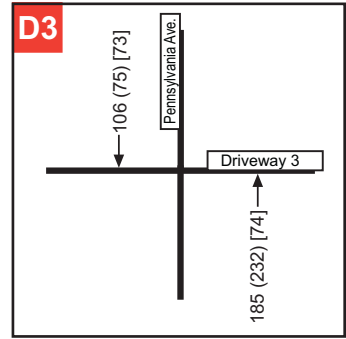
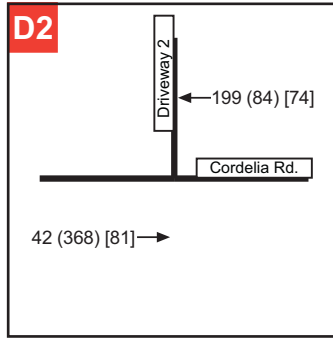
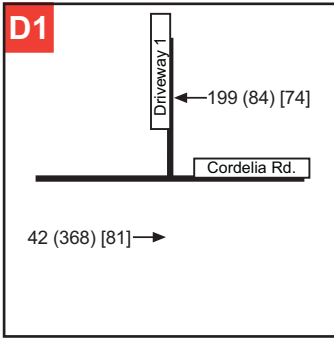
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EXISTING PEAK HOUR TRAFFIC VOLUMES

FIGURE 7A



LEGEND:

XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour



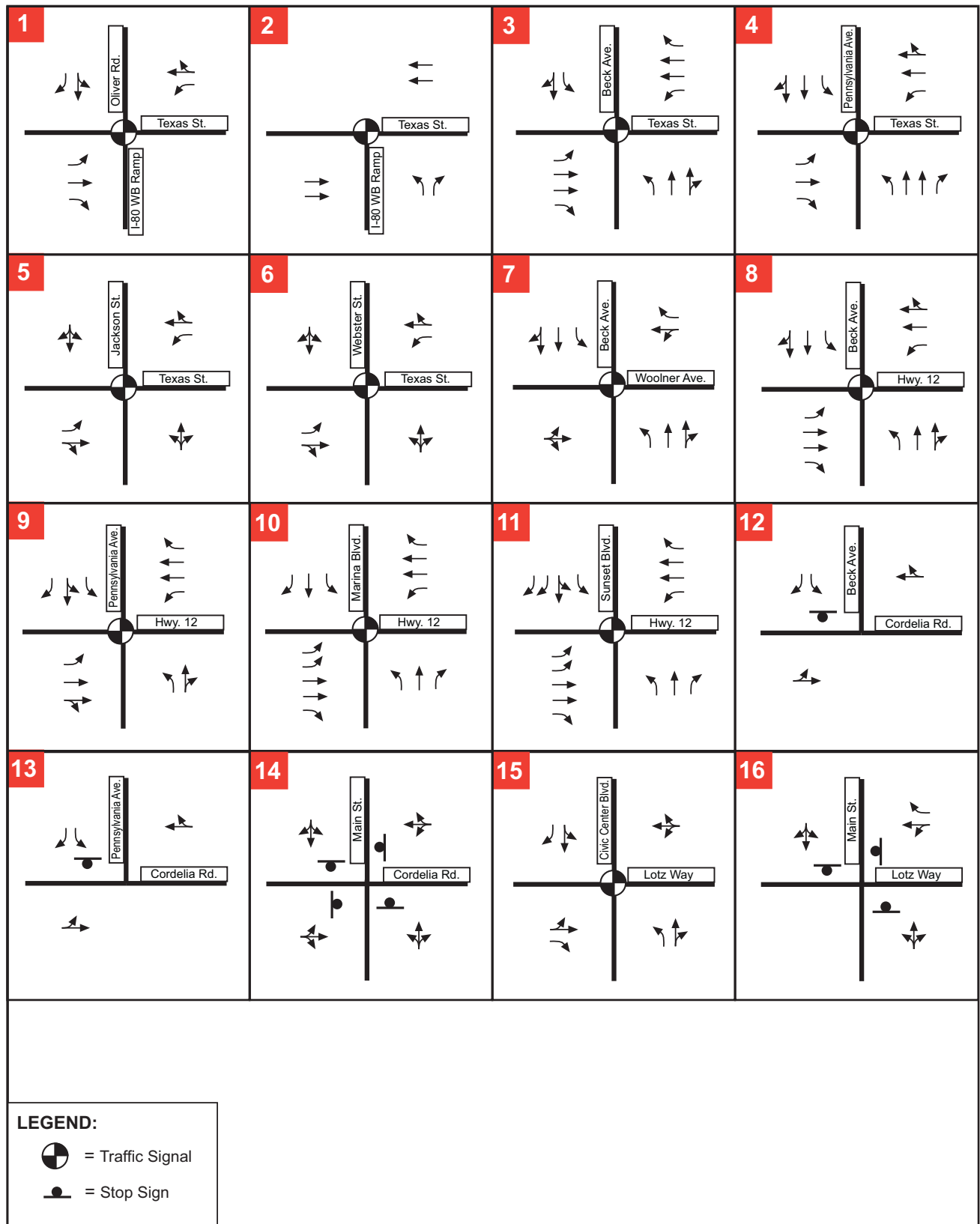
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EXISTING DRIVEWAY VOLUMES

FIGURE 7B



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EXISTING LANE CONFIGURATIONS

FIGURE 8

4. PROJECT TRANSPORTATION CONDITIONS

This chapter presents the project description, project parcelization, a site plan of the project showing the major driveways and internal roadways, the project trip generation, the project trip distribution, and the project trip assignment.

PROJECT DESCRIPTION

The Gentry/Suisun Annexation involves the annexation of 172.5 acres of land from Solano County into the City of Suisun City. A portion of this 172.5 acres area will be developed into commercial and residential uses while the remaining areas will be maintained as farmland.

PROJECT PARCELIZATION

The site will be divided into the following parcels:

- Planning Area 1- This site will contain either commercial uses or a mixture of commercial and residential uses depending on the alternative. Under the Base Project, this site would develop as a 655 KSF shopping center. Under Alternative 1, the site would develop as a 480 KSF shopping center with 120 homes on the remaining areas of the site. Under Alternative 2, this site would have a 350 KSF shopping center combined with 250 homes. Retail uses on this site will vary from large big-box retail to small shops. These residences will likely be town homes or high-density single family homes.
- Planning Area 2- Up to 275 dwelling units at 21 dwelling units per acre on a site of about 13 acres would be developed under the Base Alternative. Under Alternative 1 and 2, up to 196 dwelling units would be built. These homes could be town homes or other forms of high density single-family homes (patio homes, zero-lot line homes, etc).
- Planning Area 3- Development on this rate would range from 84 units (Base Project) to 96 units (Alternative 1 or 2). As in Planning Area 2, these homes would develop as either town homes or high density single-family homes.
- Ardave Parcel- This parcel is less than 1 acre in site and is proposed to contain light industrial or office type uses. Approximately 16 KSF of office or light industrial uses could be developed on this site. Under the Base Project, the site would be entirely office while under Alternatives 1 and 2, the site would develop as 4 KSF of office and 12 KSF of light industrial buildings.
- Gilbert Parcel- This portion of the site is approximately 5 acres in size and would contain about 65 KSF of general retail uses or light industrial uses. Under the Base Project, this site would be developed entirely as commercial uses. Under Alternatives 1 and 2, this parcel would develop as 10 KSF of commercial and 50 KSF of light industrial.

A significant portion of the site (Planning Area 4- 70 acres) is anticipated to remain as an agricultural use. The segregation of the site into the above parcels is shown on Figure 9.

PROJECT DRIVEWAYS & ROADWAYS

Main access to the project site will be provided by along Pennsylvania Avenue. At least five major driveways will be created along Pennsylvania Avenue south of SR 12 along the project frontage. This traffic study will assume

initially that all driveways on Pennsylvania Avenue have full access, both left and right-turns into and out of each driveway. Any recommendations to modify or change this access will be discussed in subsequent chapters of this report.

The project site plan also details an internal roadway network within the commercial site. This roadway network includes a major east-west roadway as well as a major roadway which connects to Pennsylvania Avenue. The location of the major driveways and internal roadways, as they are currently designed, are shown on Figures 10 (Base Project), 11 (Alternative 1) and 12 (Alternative 2).

PROJECT TRIP GENERATION

Fehr & Peers estimated the project trip generation by applying standard trip generation rates, based on empirical research compiled by the Institute of Transportation Engineers (ITE). ITE compiles trip generation studies for various sites, groups these studies into categories, and then develops rates and equations which can be applied to similar projects. These trip generation studies are summarized in ITE's *Trip Generation (7th Edition)* with additional information provided in the *Trip Generation Handbook*.

The approach for estimating the project trip generation is as follows:

1. Categorize project land uses into appropriate ITE categories
2. Identify trip generation rates and/or trip generation equations
3. Apply trip generation reductions
4. Calculate Final Trip Generation

Categorize Project Land Uses

Appropriate ITE categories were applied to each of the proposed uses within the project site. Where multiple categories were available for use, more general categories were applied given the general level of uncertainty regarding the precise configuration of future development on the site.

Retail Uses- Anticipated retail development for the site will vary from 360 KSF to 720 KSF. Most of this development will be located on Planning Area 1 with some additional development on the Gilbert Parcel.

The larger shopping center is described as containing a variety of different retail uses. Given this, two possible approaches were considered to categorize the uses within the larger shopping center. One possible approach would be to consider the larger shopping center as single, discrete use and apply a generic shopping center category (Land Use Code 820). A second approach would be to apply different trip generation categories to the various proposed uses within the larger retail center. For example, the superstore would be analyzed under Land Use Code 813 (Free-Standing Discount Superstore). The remaining components of the larger shopping center would be analyzed using Land Use Code 820 or another retail category, such as 816 (Specialty Retail). For the following reasons, the larger shopping center was categorized as a single shopping center:

- ITE defines a shopping center as “an integrated group of commercial establishments that is planned, developed, owned, and managed as a single unit”. This retail site will certainly operate as a single unit. For example, it is likely that there will be trip chaining within the site whereby a visitor travels to multiple stores on a single visit to the site.

- The proposed uses on the site have not been finalized and the use of a specific category could lead to later revisions in the traffic study
- The trip generation rate between Land Use Code 813 (Superstore) and Land Use Code 820 (Shopping Center) are similar. For example, the average rate for a superstore is 3.87 in the PM period while the average rate for a shopping center is 3.97 during that same period
- The shopping center use has been studied extensively by ITE over the past 40 years. There have been hundreds of trip generation studies for shopping centers while there are only 10 studies for Land Use Code 813.

No uses have been specified for the smaller retail shopping center; therefore Land Use Code 820 (Shopping Center) was employed for this smaller center as well.

Residential Uses- The project description indicates that the residential uses on the site will contain medium to high-density residential units. These units could consist of condominiums, attached town homes, or small lot single-family homes. Regardless of the actual configuration of the residential uses, all of the housing will be for sale housing as opposed to rental housing. Given the variety of possible housing types on this site, a general residential category (Land Use Code 230- Residential Condos/Townhouses), was employed.

Office Park/Light Industrial- The project description indicates that a small portion of the project will develop an a small office facility and some additional light industrial uses. The office has been classified as a General Office (Land Use Code 710). The light industrial uses on the site would be classified as Land Use Code 110 (Light Industrial).

Trip Generation Rates

Trip Generation rates are reported in Table 4A (Base Project), Table 4B (Alternative 1) and Table 4C (Alternative 2). For those instances where an equation is applied, the trip rate represents the calculated rate based on the results of the equations. For those uses when a trip rate is applied, the trip rate from the ITE manual is reported.

TRIP GENERATION REDUCTIONS

Trip reductions are typically applied for one of three reasons. One possible reduction is the pass-by trip reduction, which reflects existing trips on the roadway which temporarily stop at a retail use. This reduction is often applied to commercial uses. For example, much of the traffic associated with a gas station or a convenience stop at such a use to while traveling between other destinations. Empirical support for pass-by trip reductions is provided by the ITE *Trip Generation Handbook*, which summarizes previous studies of pass-by trips at various types of land uses. Second, reductions are sometimes made for mixed use projects whereby some of the trips are internalized within the project site. For example, a project containing both residences and offices should have some internalized trips if any of the workers were to live in the adjacent housing. Third, trip generation reductions are sometimes made if there are significant transit trips associated with a site. These reductions would generally be applied to development located at or near an existing or future transit station.

For this analysis, a pass-by reduction was applied. According to the *Trip Generation Handbook*, the expected pass-by rate for a retail center of this size would range from 20-25 percent, depending on the size of the center. This reduction was applied to all of the commercial uses within the site. Under the Base Project, the pass-by percentage was 20 percent while the pass-by percentage increased slightly under Alternatives 1 and 2 to 25 percent.

Some reduction for internalized trips were applied under Alternatives 1 and 2, which contain parcels which are mixed use, whereby two complementary uses are located on the same parcel and are accessible without having to use the external roadway network. These complementary uses are located in Planning Area 1, which has both commercial and residential uses in Alternatives 1 and 2. Using methodologies outlined by the *Trip Generation Handbook*, we estimated the internalization on Planning Area 1 to be two percent of the total trips associated with the site.

Additionally, no reduction for transit use was taken either. Given that there is no existing transit service to the site, no reduction for transit use can be taken.

TRIP GENERATION CALCULATIONS

Under the Base Project configuration, the proposed project is estimated to generate 21,691 daily trips, 578 morning peak hour trips (295 inbound and 283 outbound), 2,040 afternoon peak hour trips (1,005 inbound and 1,035 outbound), and 2,654 Saturday midday peak hour trips (1,382 inbound and 1,272 outbound).

Alternative 1 is estimated to generate 16,543 daily trips, 518 morning peak hour trips (264 inbound and 254 outbound), 1,562 afternoon peak hour trips (762 inbound and 800 outbound), and 1,946 Saturday midday peak hour trips (1,015 inbound and 931 outbound).

Alternative 2 is estimated to generate 14,575 daily trips, 509 morning peak hour trips (240 inbound and 269 outbound), 1,370 afternoon peak hour trips (679 inbound and 691 outbound), and 1,662 Saturday midday peak hour trips (869 inbound and 793 outbound).

TRIP DISTRIBUTION

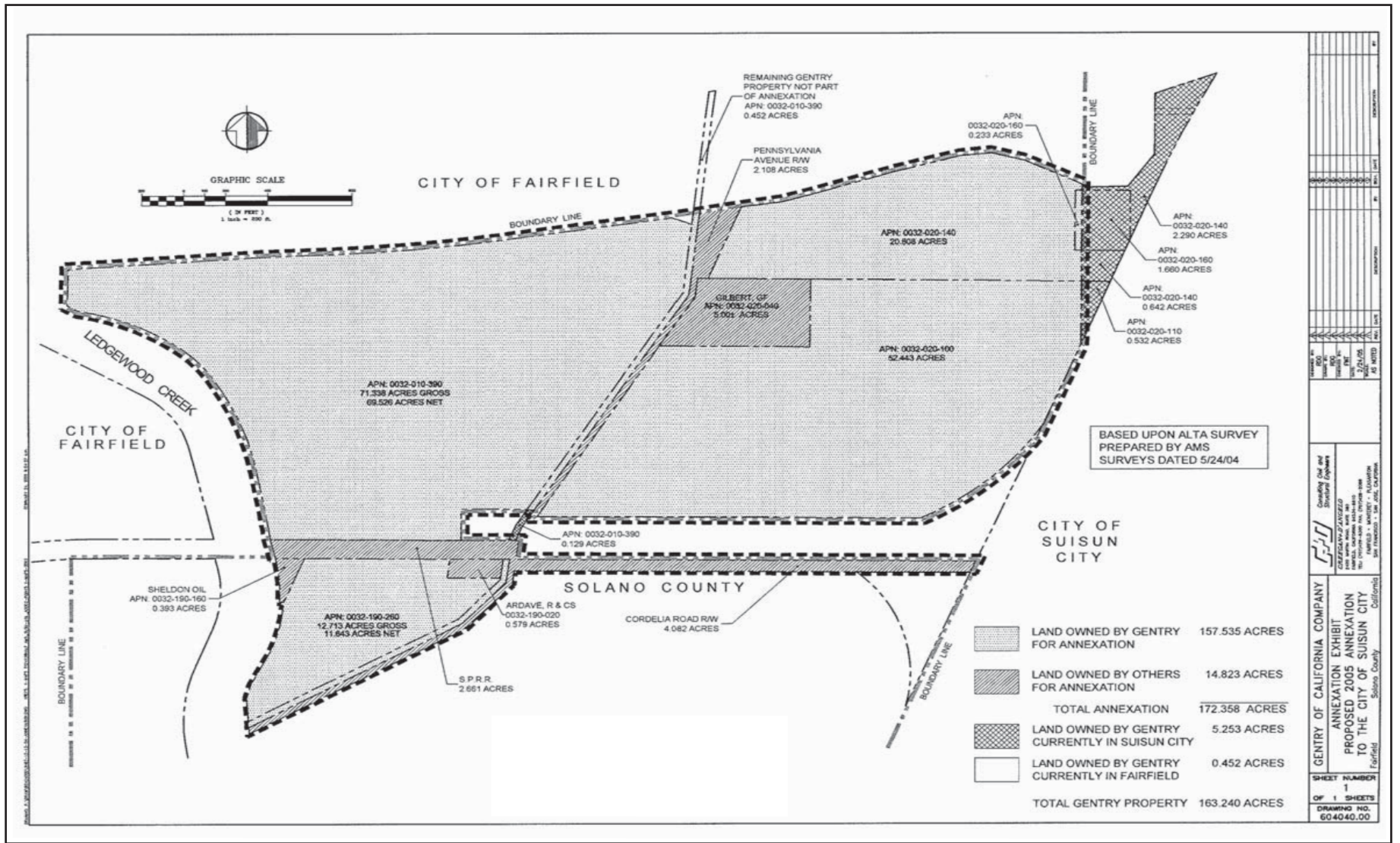
The project trip distribution was based on results obtained from the STA Regional Travel Demand Model, whereby the project was input into the model and the model trips were tracked through the roadway network to determine their likely origin and destinations. A minor adjustment to these results was made reflect the internalization of a small percentage (5 percent) of project trips within the site. The project trip distribution is shown on Figure 13.

As shown on this graphic, approximately 40 percent of the project trips travel into the City of Fairfield, while 15 percent travel to downtown Suisun City, 15 percent travel either east or west down SR 12. Some of the traffic from the project is assumed to travel on I-80 to the north as well.

TRIP ASSIGNMENT

The assignment of project trips under the Base Project is shown on Figures 14A (off-site intersections) and 14B (project driveways). The Alternative 1 project trip assignment is shown on Figures 15A (off-site intersections) and 15B (project driveways). The Alternative 2 project trip assignment is shown on Figures 16A (off-site intersections) and 16B (on-site intersections).

Figures 17, 18, and 19 provide the pass-by trip assignment for the Base Project, Alternative 1 and Alternative 2 respectively.



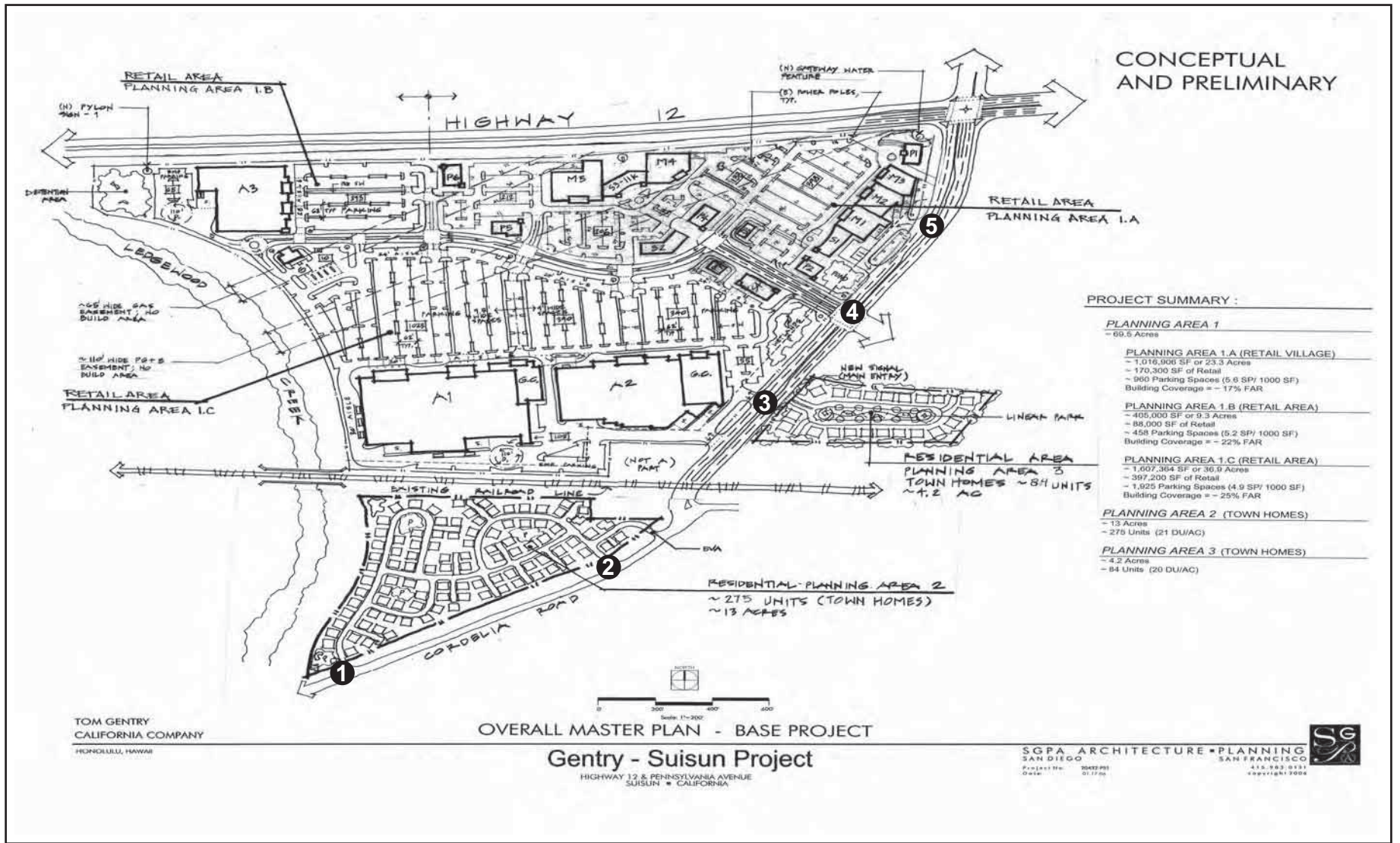
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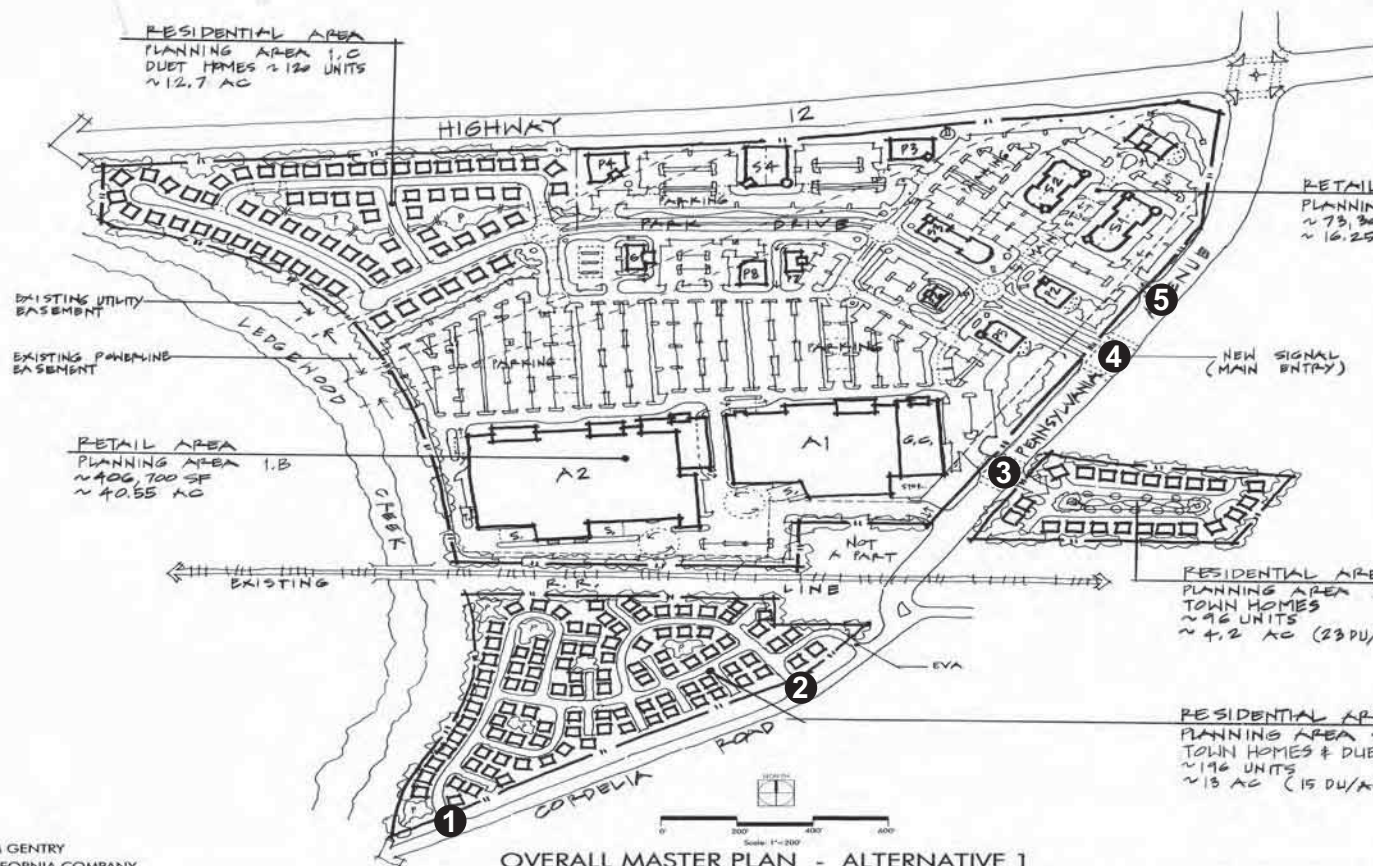
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PROJECT PARCELS

FIGURE 9



CONCEPTUAL AND PRELIMINARY



RESIDENTIAL AREA
PLANNING AREA 1.C
DUET HOMES ~ 120 UNITS
~ 12.7 AC

RETAIL AREA
PLANNING AREA 1.A
~ 73,300 SF
~ 16.25 AC

PROJECT SUMMARY :

- PLANNING AREA 1**
- 69.5 Acres
- PLANNING AREA 1.A (RETAIL VILLAGE)**
- 708,024 SF or 16.25 Acres
- 73,300 SF of Retail
- 440 Parking Spaces (6.0 SP/ 1000 SF)
Building Coverage = ~10.4% FAR
- PLANNING AREA 1.B (RETAIL AREA)**
- 1,766,358 SF or 40.55 Acres
- 406,700 SF of Retail
- 1821 Parking Spaces (5.0 SP/ 1000 SF)
Building Coverage = ~23.0% FAR
- PLANNING AREA 1.C (DUET HOMES)**
- 12.7 Acres
- 120 Units (6-10 DU/AC)
- PLANNING AREA 2 (DUET HOMES)**
- 13 Acres
- 196 Units (15 DU/AC)
- PLANNING AREA 3 (TOWN HOMES)**
- 4.2 Acres
- 96 Units (23 DU/AC)

RESIDENTIAL AREA
PLANNING AREA 2
TOWN HOMES & DUET HOMES
~ 196 UNITS
~ 13 AC (15 DU/AC)

RESIDENTIAL AREA
PLANNING AREA 3
TOWN HOMES
~ 96 UNITS
~ 4.2 AC (23 DU/AC)

TOM GENTRY
CALIFORNIA COMPANY
HONOLULU, HAWAII

OVERALL MASTER PLAN - ALTERNATIVE 1

Gentry - Suisun Project

HIGHWAY 12 & PENNSYLVANIA AVENUE
SUISUN, CALIFORNIA

SGPA ARCHITECTURE • PLANNING
SAN DIEGO SAN FRANCISCO
PROJECT NO. 0603-01 DATE 01/12/06



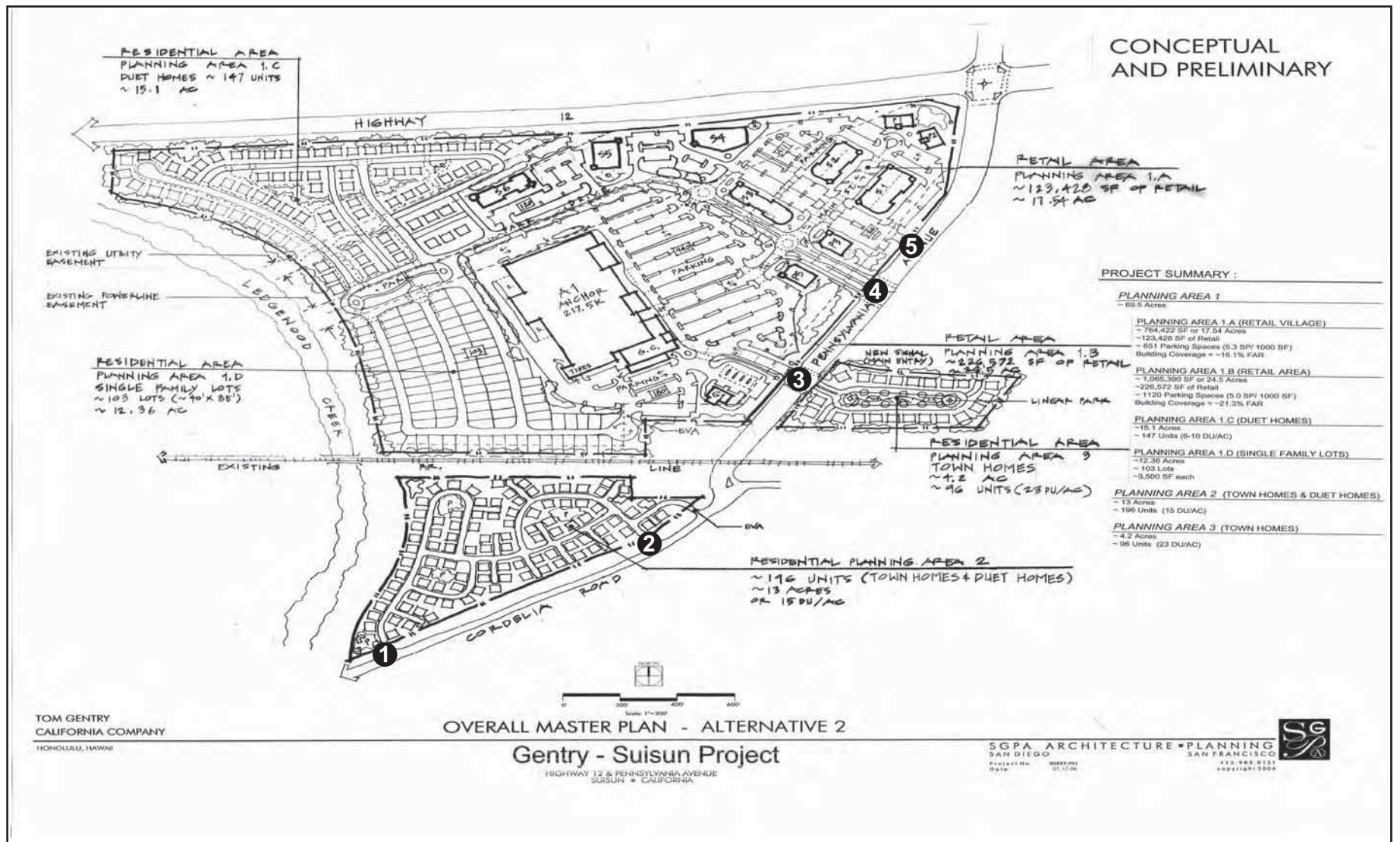
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DRIVEWAY LOCATION - ALTERNATIVE 1

FIGURE 11



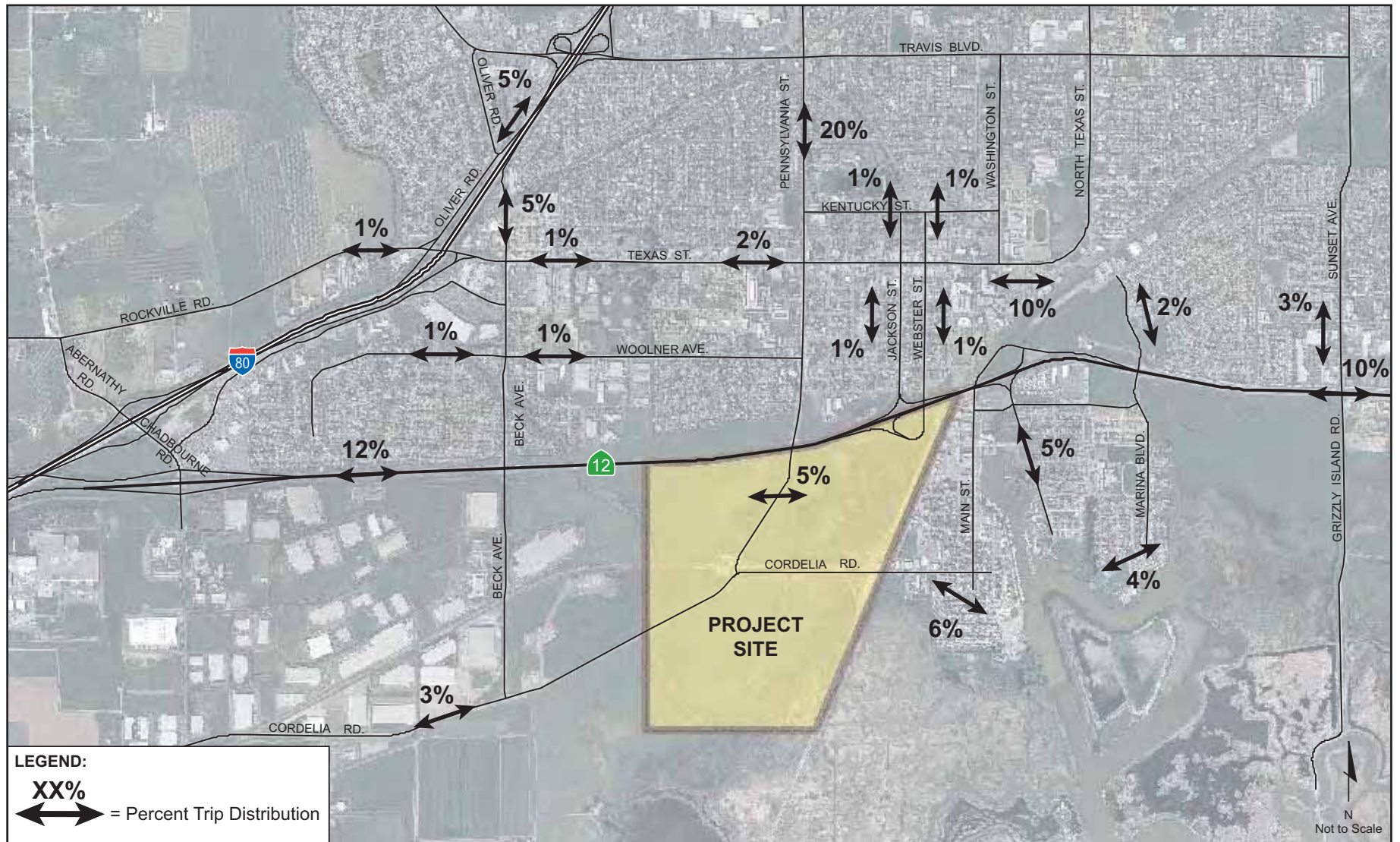
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DRIVEWAY LOCATION - ALTERNATIVE 2

FIGURE 12



Gentry-Suisun Annexation

**Table 4A
Trip Generation Estimates for Gentry/Suisun Annexation**

Land Use	Size	Trip Generation Rates			Trip Generation Estimates											
		Daily	AM Peak	PM Peak	SAT Peak	AM Peak Hour			PM Peak Hour			Sat Midday Peak Hour				
			Hour	Hour		Hour	In	Out	Total	In	Out	Total	In	Out	Total	
Retail (Shopping Center)																
Planning Area 1 + Gilbert Parcel	720,839 s.f.	34.02	0.71	3.20	4.34	24,521	312	200	512	1107	1199	2,306	1625	1500	3,125	
				Retail Subtotal:		24,521	312	200	512	1,107	1,199	2,306	1,625	1,500	3,125	
				Passby Reduction (20%)		-4,904	-62	-40	-102	-221	-240	-461	-325	-300	-625	
				Total Net Retail:		19,617	250	160	410	886	959	1,845	1,300	1,200	2,500	
Residential																
Residential Condo/Townhouse	359 d.u.	5.30	0.40	0.48	0.41	1,902	24	120	144	115	56	171	79	68	147	
				Total Net Housing:		1,902	24	120	144	115	56	171	79	68	147	
General Office Building	15,682 s.f.	11.01	1.55	1.49	0.41	173	21	3	24	4	19	23	3	3	6	
				Total Limited Industrial/Business Park:		173	21	3	24	4	19	23	3	3	6	
				Total Net Trips:		21,691	295	283	578	1,005	1,035	2,039	1,382	1,271	2,653	

Notes:
 Trip Generation Rates: ITE Trip Generation, 7th Edition
 Passby Reduction applied per ITE Trip Generation Handbook for Shopping Center based on 720,000 square feet of Retail
 Internalization Trips within the proposed site will be analyzed in TRAFFIX model

**Table 4B
Trip Generation Estimates for Gentry/Suisun Annexation- Alternate Configuration**

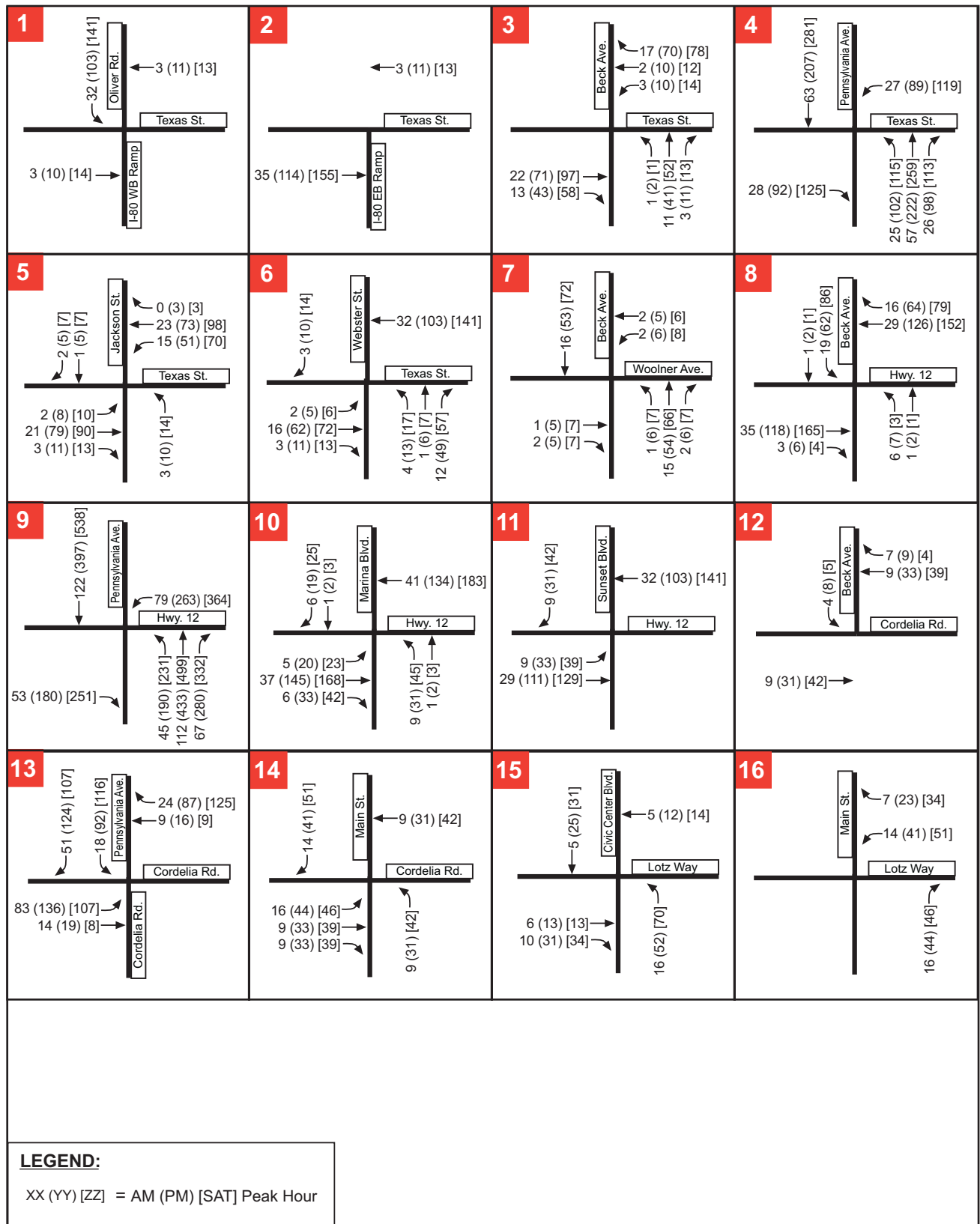
Land Use	Size	Trip Generation Estimates														
		Trip Generation Rates				AM Peak Hour			PM Peak Hour			Sat Midday Peak Hour				
		Daily	AM Peak Hour	PM Peak Hour	SAT Peak Hour	Daily	In	Out	Total	In	Out	Total	In	Out	Total	
Retail (Shopping Center)																
Planning Area 1 + Gilbert Parcel	490,000 s.f.	38.94	0.83	3.65	4.96	19,079	248	158	406	858	929	1,787	1,265	1,167	2,432	
Retail Subtotal:						19,079	248	158	406	858	929	1,787	1,265	1,167	2,432	
Internal Trip Reduction (2%)						-191	-2	-2	-5	-9	-9	-19	-13	-13	-25	
Passby Reduction (25%)						-4,770	-62	-40	-102	-215	-232	-447	-316	-292	-608	
Total Net Retail:						14,118	184	116	300	634	687	1,322	936	863	1,799	
Residential																
Residential Condo/Townhouse	412 d.u.	5.19	0.39	0.47	0.39	2,139	27	133	160	129	63	192	87	75	162	
Internal Trip Reduction for Residential						-191	-2	-2	-5	-9	-9	-19	-13	-13	-25	
Total Net Housing:						1,948	25	131	155	120	54	173	74	62	137	
General Office Building	4,000 s.f.	11.01	1.55	1.49	0.41	44	5	1	6	1	5	6	1	1	2	
Light Industrial	62,000 s.f.	6.97	0.92	0.98	0.14	432	50	7	57	7	53	61	4	5	9	
Total Limited Industrial/Business Park:						476	56	8	63	8	58	67	5	6	11	
Total Net Trips:						16,543	264	254	518	762	800	1,562	1,015	931	1,946	

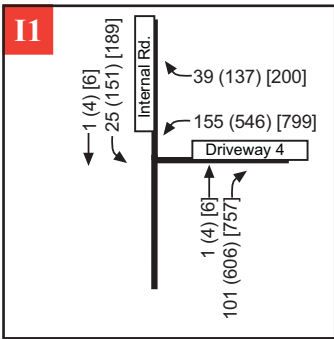
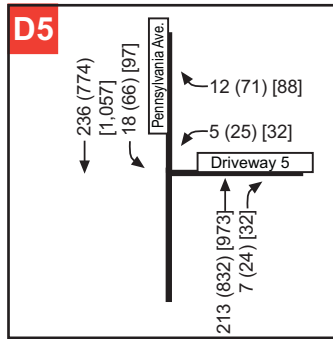
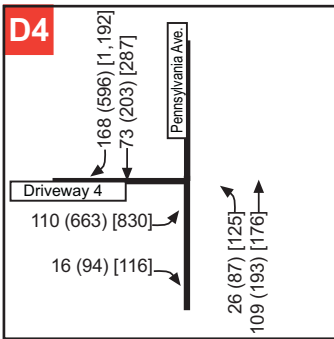
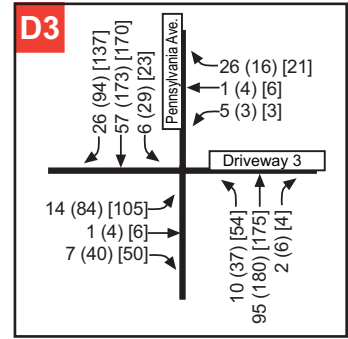
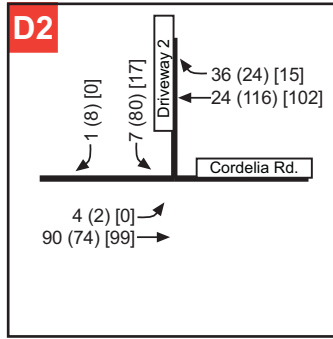
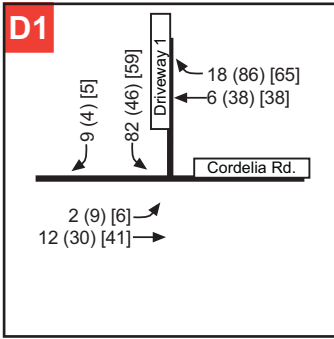
Notes:
 Trip Generation Rates: ITE Trip Generation, 7th Edition
 Passby Reduction applied per ITE Trip Generation Handbook for Shopping Center based on 490,000 square feet of Retail

**Table 4C
Trip Generation Estimates for Gentry/Suisun Annexation- Alternate Configuration**

Land Use	Size	Trip Generation Rates			Trip Generation Estimates											
		Daily	AM Peak	PM Peak	SAT Peak	AM Peak Hour			PM Peak Hour			Sat Midday Peak Hour				
			Hour	Hour	Hour	Daily	In	Out	Total	In	Out	Total	In	Out	Total	
Retail (Shopping Center)																
Planning Area 1 + Gilbert Parcel	360,000 s.f.	43.38	0.94	4.05	5.53	15,615	206	132	338	700	758	1,458	1035	955	1,990	
						Retail Subtotal:	15,615	206	132	338	700	758	1,458	1,035	955	1,990
						Internal Trip Reduction (2%)	-156	-2	-2	-4	-8	-8	-15	-10	-10	-21
						Passby Reduction (25%)	-3,904	-52	-33	-85	-175	-190	-365	-259	-239	-498
						Total Net Retail:	11,555	152	97	249	517	561	1,078	766	706	1,472
Residential																
Residential Condo/Townhouse	542 d.u.	4.98	0.37	0.44	0.37	2,700	34	166	200	161	79	240	108	92	200	
						Internal Trip Reduction for Residential	-156	-2	-2	-4	-8	-8	-15	-10	-10	-21
						Total Net Housing:	2,544	32	164	196	153	71	225	98	82	179
General Office Building	4,000 s.f.	11.01	1.55	1.49	0.41	44	5	1	6	1	5	6	1	1	2	
Light Industrial	62,000 s.f.	6.97	0.92	0.98	0.14	432	50	7	57	7	53	61	4	5	9	
						Total Limited Industrial/Business Park:	476	56	8	63	8	58	67	5	6	11
						Total Net Trips:	14,575	240	268	509	679	691	1,370	869	793	1,662

Notes:
 Trip Generation Rates: ITE Trip Generation, 7th Edition
 Passby Reduction applied per ITE Trip Generation Handbook for Shopping Center based on 360,000 square feet of Retail





LEGEND:

XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour



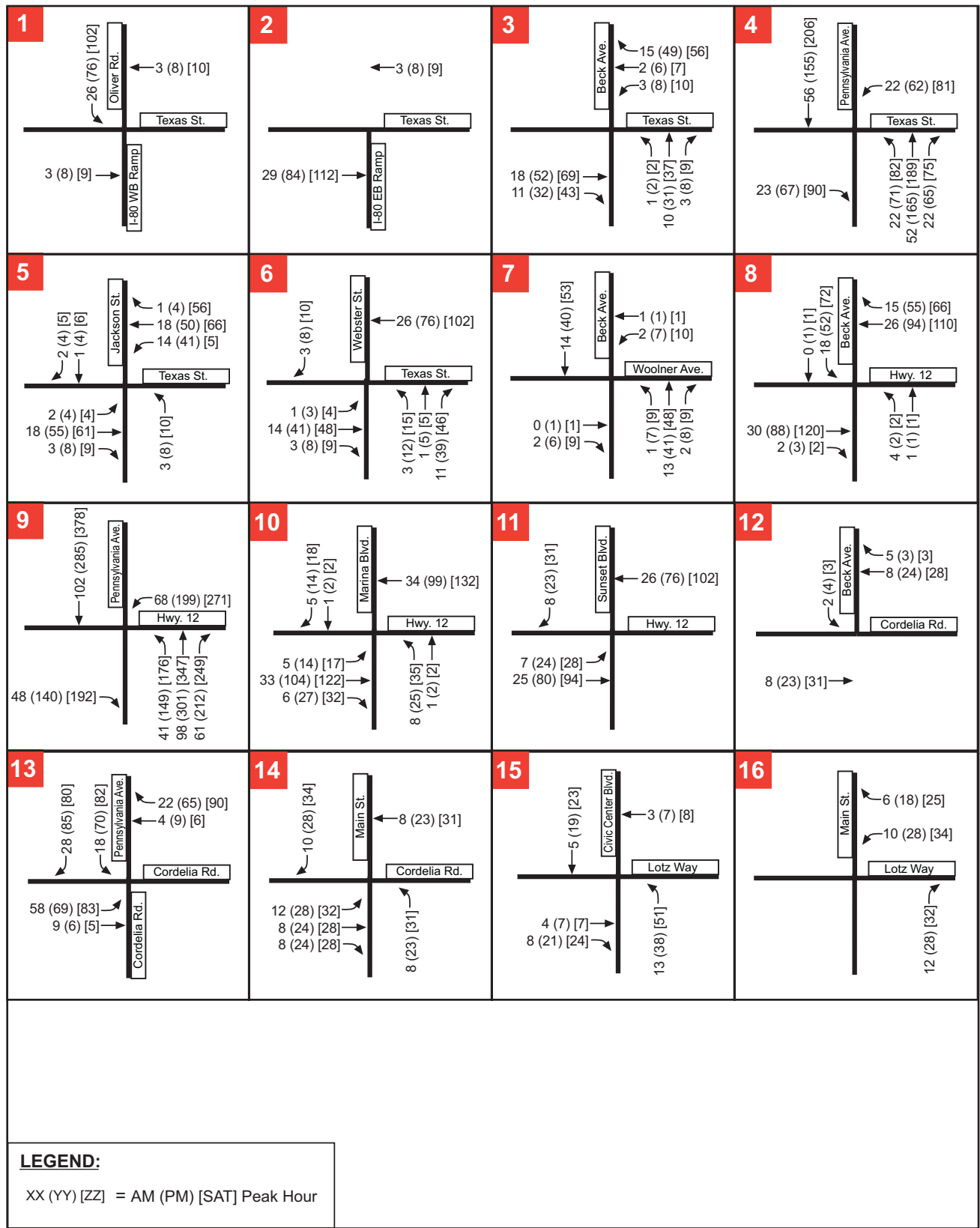
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PROJECT TRIPS - BASE PROJECT

FIGURE 14B



LEGEND:
 XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour



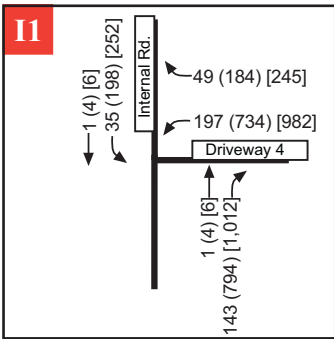
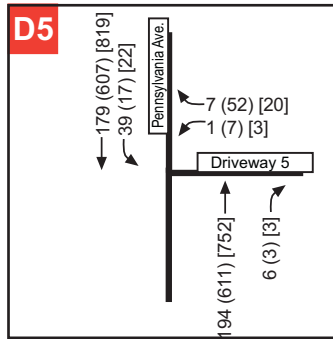
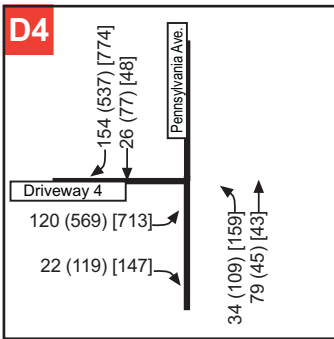
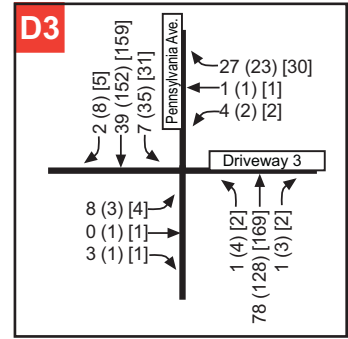
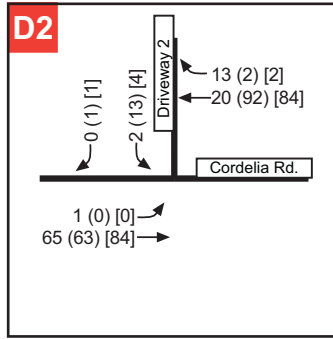
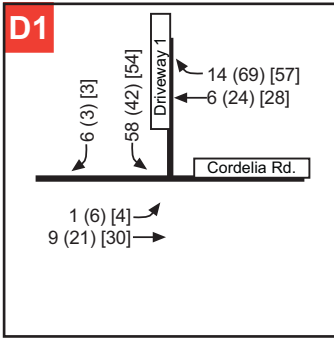
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PROJECT TRIPS ONLY
ALTERNATIVE 1

FIGURE 15A



LEGEND:

XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour



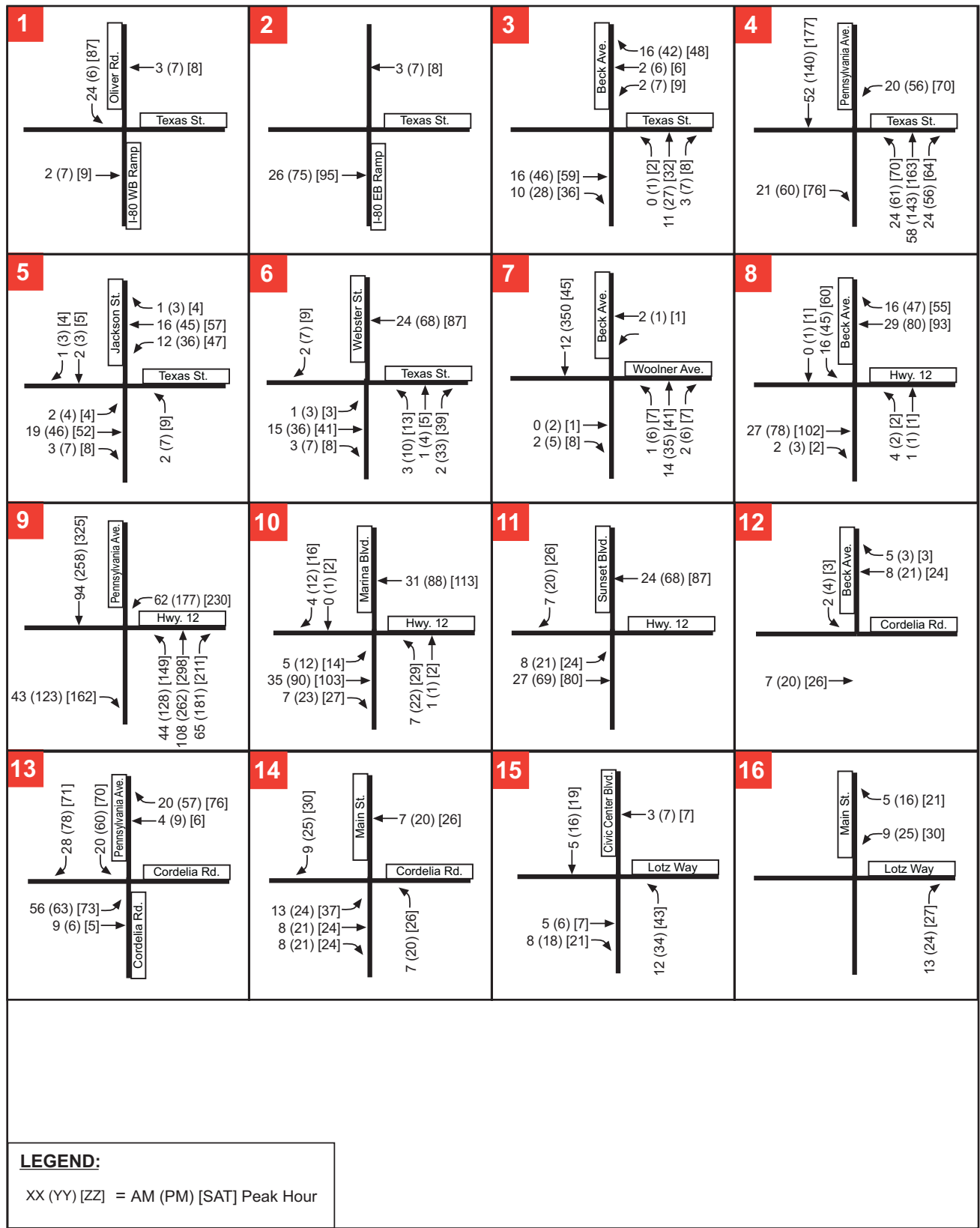
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ALTERNATIVE 1 - PROJECT ONLY

FIGURE 15B



LEGEND:

XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour



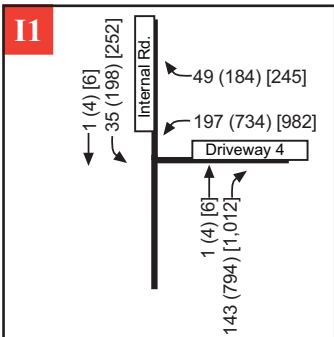
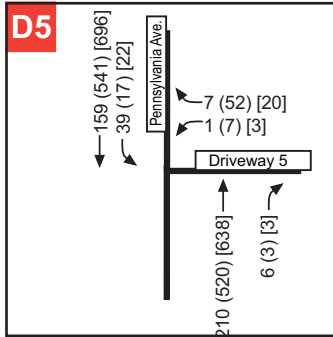
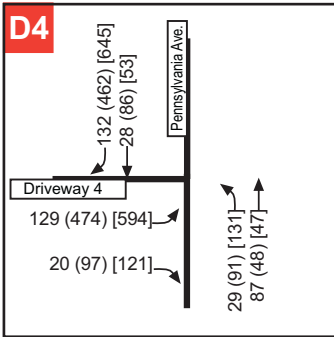
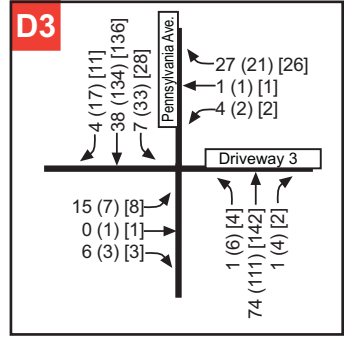
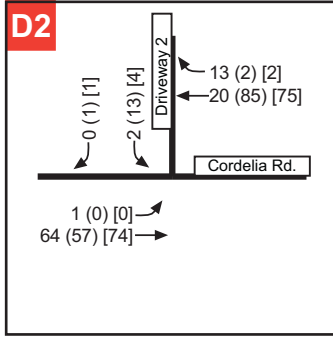
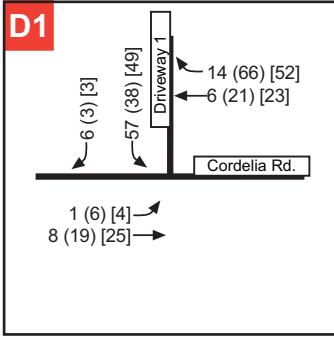
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PROJECT TRIPS ONLY
- ALTERNATIVE 2

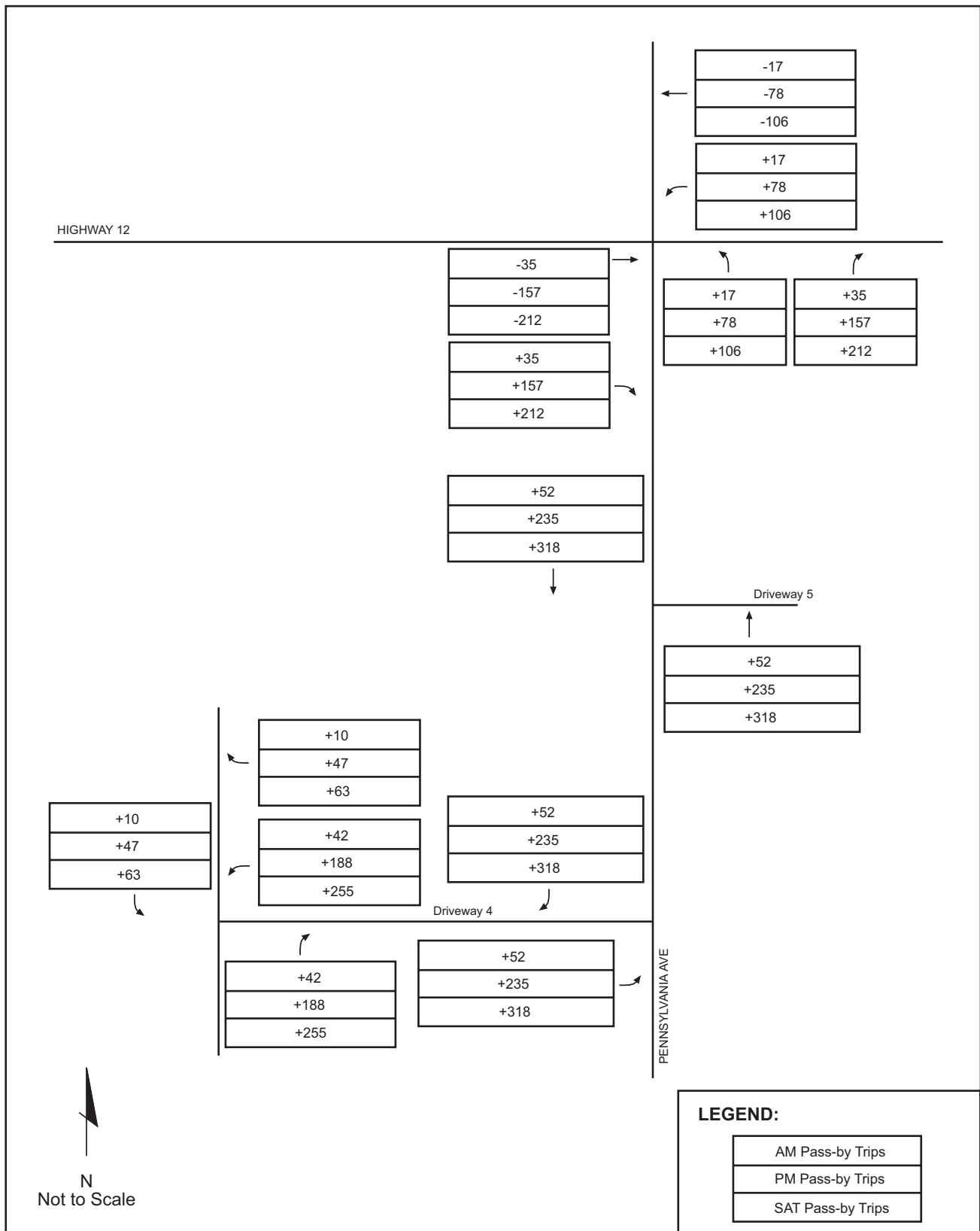
FIGURE 16A



LEGEND:

XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour





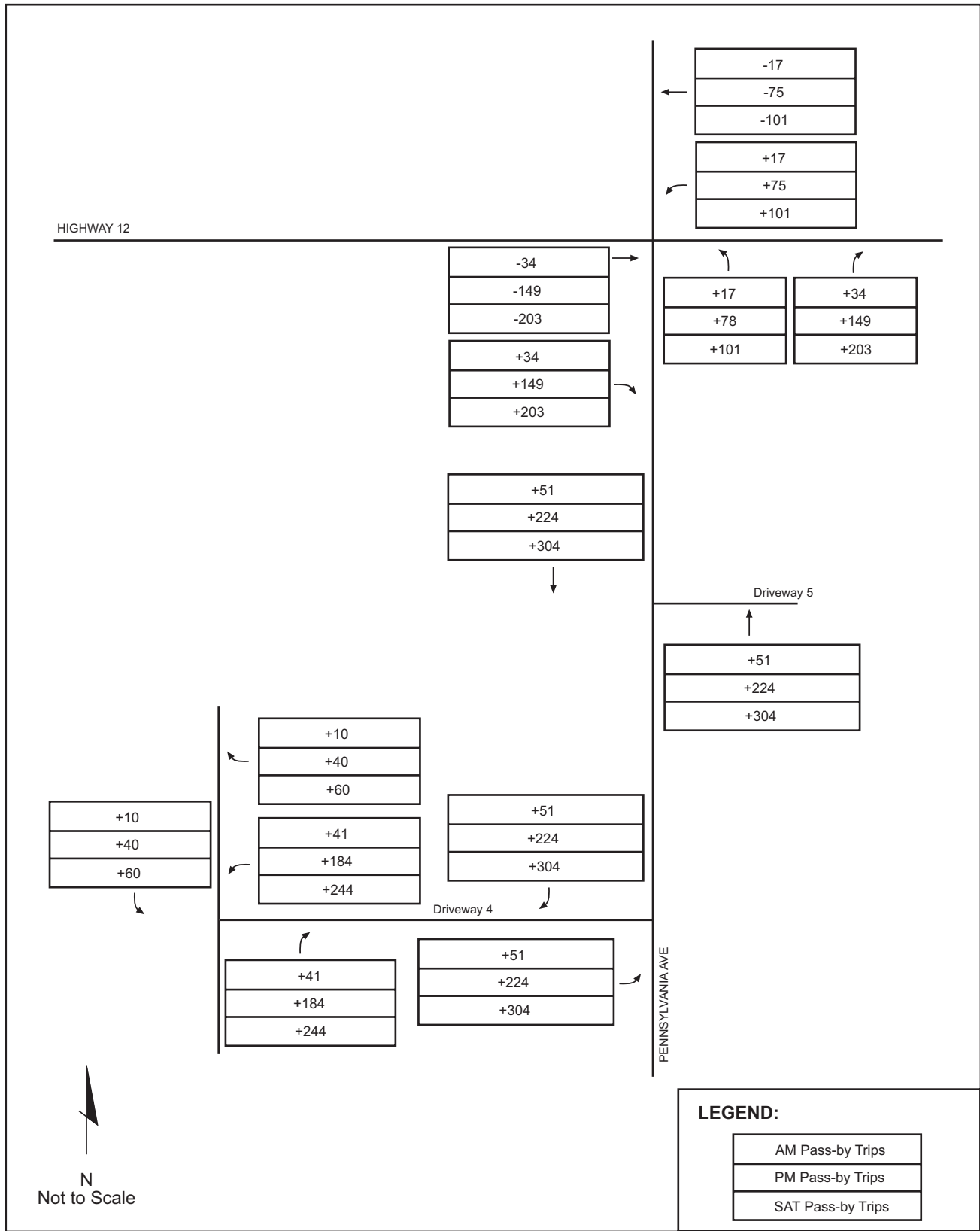
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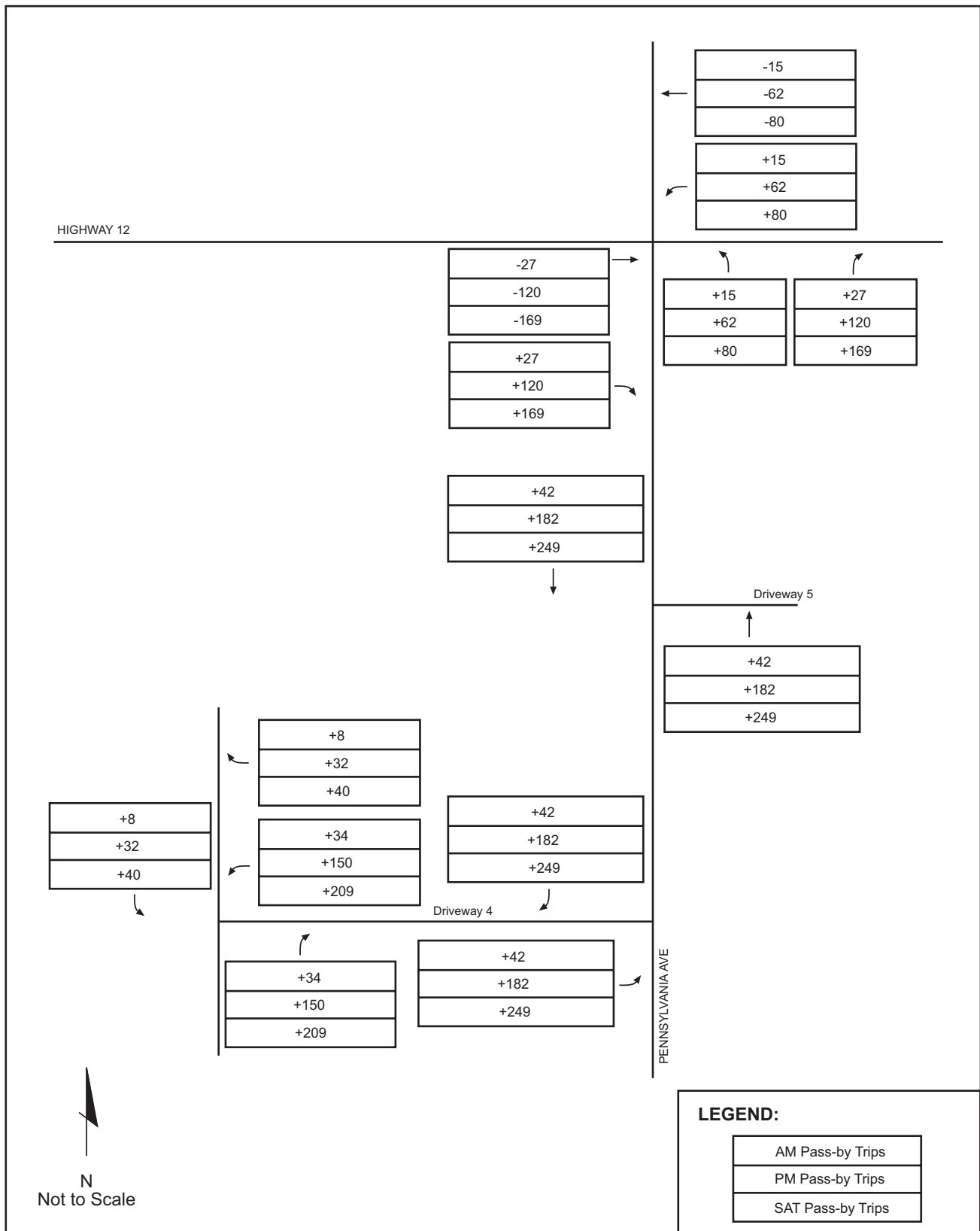
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**PASS-BY TRIP ASSIGNMENT
BASE PROJECT**

FIGURE 17





5. FUTURE TRANSPORTATION IMPROVEMENTS

This chapter summarizes the future transportation improvements that are anticipated to occur in the project study area without the construction of the project. Transportation Facilities addressed in this discussion include highways such as SR 12 and other roadways located both in Suisun City and the City of Fairfield. This chapter also addresses the status of various funding mechanisms such as impact fee programs that could help fund improvements that may mitigate project traffic impacts.

STATE ROUTE 12 IMPROVEMENTS

A *Major Investment Study* for SR 12 was completed by the STA in October 2001. The MIS document recommended the following improvements in the corridor:

- Acceleration and deceleration lanes at Beck Avenue
- Geometric improvements at Pennsylvania Avenue
- Widening SR 12 to six lanes to Webster/Jackson
- Adding an interchange at SR 12/Pennsylvania Avenue

Other improvements outside the project study area include additional traffic signals, adding turn lanes, and various other improvements. The cost of the all proposed improvements is \$109 million. Caltrans has currently programmed \$36 million in state funds for these improvements. Some additional funding is available from the MTC as outlined in the Transportation 2030 Plan. However, the MTC would only be able to allocate \$4 million for this improvement. One major impediment to fully funding this improvement is the prioritization of the I-80/I-680/SR 12 interchange improvement above all other roadway projects. Therefore, much of the funding that the STA anticipates receiving over the next 25 years is allocated to this project.

The STA Regional Transportation Plan indicates that improvements to SR 12 can only be funded if additional revenue sources are identified. These sources include local sales tax increases, countywide traffic impact fees, a regional gas tax increase, or future bridge toll increases. However, none of these revenue sources are currently in place and there is no guarantee that any of these funding sources could be implemented. For example, Solano County voters have rejected transportation sales tax measures in Solano County in 2002 and 2004. Based on the lack of available funding for this improvement, no improvements funded by the STA are assumed to occur to SR 12 in the project study area.

SUISUN CITY ROADWAY IMPROVEMENTS

The Suisun City General Plan contains provisions to fund needed roadway improvements but does not specify individual roadway improvements. The General Plan provides language relating to the funding of roadway improvements through fees levied against new developments. As documented in the City's recently adopted Municipal Services Review and Comprehensive Annexation Plan:

General Plan Policy 4: Arterial streets and traffic signals should be funded through fees levied against new development, with participation in the cost by adjacent property owners where applicable. In determining the amount of the fee, and the portion of the traffic improvements costs that should be borne by each new development project, the City will consider the amount of traffic generation projected by the project in relation to existing traffic volumes and road capacities.

General Plan Policy 6: Where arterial streets are needed prior to the development of the adjacent parcels, the City will create assessment districts and/or advance Off-Site Improvement Program (OSIP) funding to prevent existing levels of service from dropping.

Based on these policies, it is the clear preference of Suisun City to levy traffic fees against proposed developments to fund needed roadway improvements. However, Suisun City does not have a formal fee program with defined roadway improvements and predetermined unit costs. A formal traffic fee program would require the preparation of a nexus study, which is defined by AB 1600. Given this lack of a formal traffic fee program, no improvements are assumed to occur within Suisun City.

CITY OF FAIRFIELD ROADWAY IMPROVEMENTS

The City of Fairfield, through its recently adopted General Plan (2002), proposes to widen several roadways within the project study area. These improvements include:

- Widening Cordelia Road from I-680 to SR 12
- Widening SR 12 from I-80 to Pennsylvania Avenue
- Improving Intersections along West Texas Street at I-80

However, the General Plan did not specify funding sources for these improvements. The General Plan anticipated that these improvements would be implemented through a citywide development fee program. The precise order for the implementation of needed improvements would be a citywide Transportation Capital Improvement Plan.

Since the adoption of the General Plan, the City has implemented a citywide traffic fee program based on an AB 1600 nexus study. The fee varies by type of use and by size of that use as well. For example, a single-family dwelling unit with more than 3,000 square feet of space pays a traffic impact fee of over \$2,800. Retail uses pay the highest fee which is \$11,220 per 1,000 square feet of area. These traffic impact fees are in addition to other impact fees collected for other public facilities such as water and sewer services.

According to information provided by the City of Fairfield, the City anticipates funding the widening of SR 12 from I-80 to Pennsylvania Avenue through its traffic fee program. At this time, we cannot assure the timely completion of this improvement; therefore, we will not assume that SR 12 is widened in our traffic study.

BICYCLE/PEDESTRIAN IMPROVEMENTS

There is one proposed bicycle and pedestrian facility within the study area. This improvement is the Central County Bikeway, which is proposed along SR 12 from Suisun City to the City of Rio Vista. Portions of this improvement will be constructed as either a multi-use path on the northern side of SR 12 or as on-street facilities. The portion of this facility within the study involves the construction of a multi-use path from Marina Boulevard to the Amtrak Station, a segment of 0.6 miles.

TRANSIT IMPROVEMENTS

The Solano Transportation Authority is proposing to expand intercity transit service in Solano and Napa County, as documented in their recently adopted *Countywide Transportation Plan* (2005). One of the intercity bus routes proposed by the STA would extend from Napa to Rio Vista along SR 12. This service would serve long-distance commuters but is not currently funded at this time.

A review of available documents from other agencies indicates that there are no plans to expand or develop new transit service in the study area. For instance, the Capital Corridor JPA anticipates maintaining the same level of rail service along the Capital Corridor line, at least through 2007. The Fairfield/Suisun Transit System, through its Short Range Transit Plan, addressed only service expansions outside of the study area.

6. PROJECT INTERSECTION IMPACTS- EXISTING PLUS PROJECT SCENARIO

This chapter addresses the traffic impacts and mitigation measures associated with the Existing Plus Project Scenario, which reflects an overlay of project trips onto the existing traffic counts.

TRAFFIC VOLUMES

The traffic volumes for the Existing Plus Base Project scenario are shown on Figures 20A and 20B. The Existing Plus Alternative 1 Project volumes are shown on Figures 21A and 21B. The Existing Plus Alternative 2 Project volumes are shown on Figures 22A and 22B.

ROADWAY IMPROVEMENTS

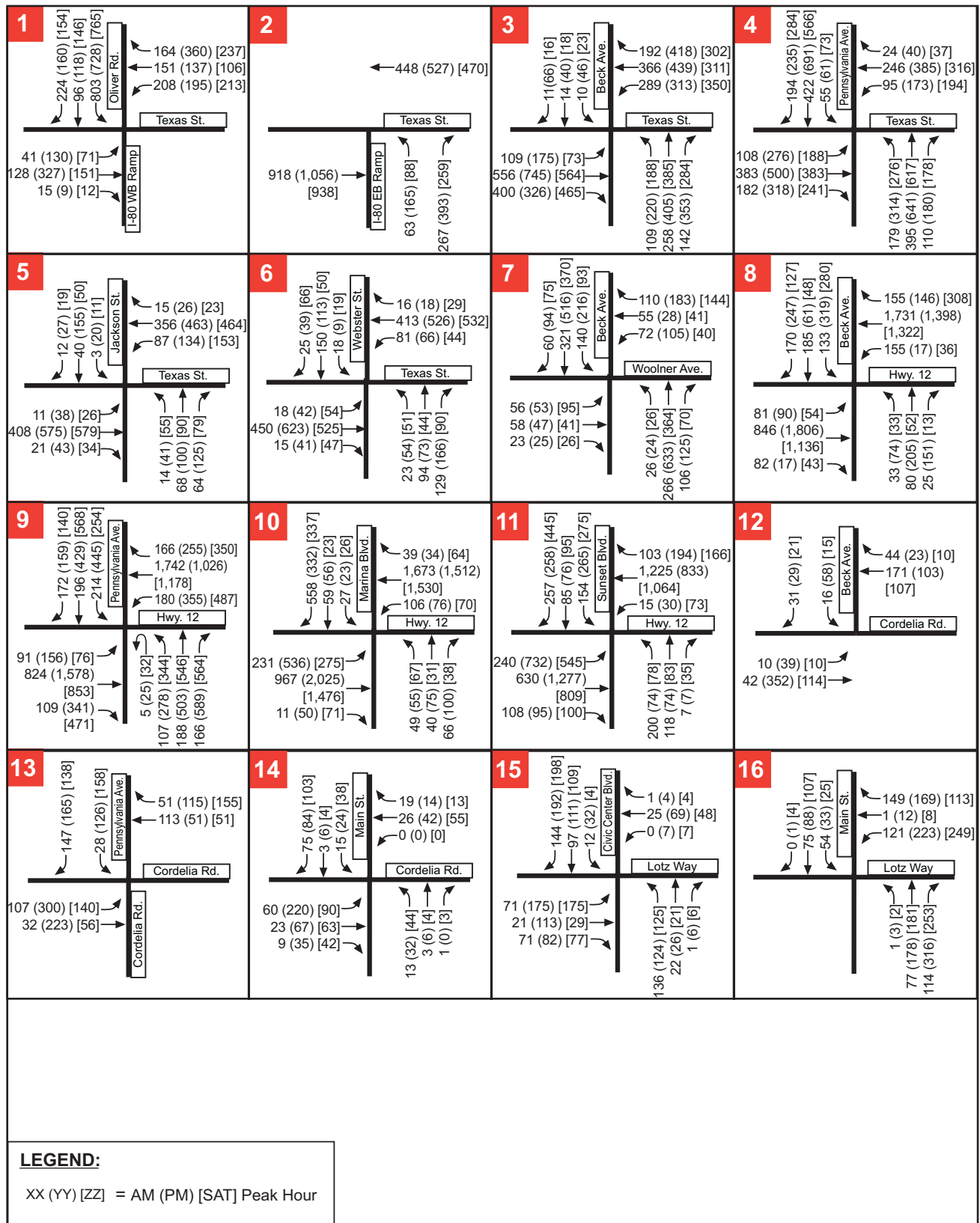
There are no assumed roadway improvements included in this scenario. For the project driveways, all of these internals are assumed to initially operate under side-street stop sign control. The major internal intersection is also assumed to operate under all-way stop control. This assumption allows us to verify the need for additional traffic control devices and address any possible phasing of improvements. Additionally, Pennsylvania Avenue is assumed to have only one travel lane in each direction for this analysis. This assumption again allows us to verify the need to widen Pennsylvania Avenue and address phasing related to this widening.

INTERSECTION OPERATIONS

The LOS results are shown on Table 5 for all three analysis scenarios. The Existing Plus Project LOS results are provided as Appendix C.

Table 5- Existing Plus Approved LOS Results

Intersection	Jurisdiction	Traffic Control Device	Peak Hour Period	Existing		Existing + Base Project		Existing + Alternative 1		Existing + Alternative 2	
				Average Intersection Delay	LOS	Average Intersection Delay	LOS	Average Intersection Delay	LOS	Average Intersection Delay	LOS
				1. Texas St/I-80 WB Ramp	Caltrans	Signal	AM PM SAT	32 48 31	C D C	34 64 41	C E D
2. Texas St/I-80 EB Ramp	Caltrans	Signal	AM PM SAT	25 30 24	C C C	25 33 26	C C C	25 32 25	C C C	25 32 25	C C C
3. Texas St/Beck Ave	Caltrans	Signal	AM PM SAT	29 42 37	C D D	29 44 39	C D D	29 44 38	C D D	29 43 38	C D D
4. Texas St/Pennsylvania Ave	Fairfield	Signal	AM PM SAT	32 57 35	C E D	34 79 55	C E E	33 71 45	C E D	33 69 42	C E D
5. Texas St/Jackson St	Fairfield	Signal	AM PM SAT	13 16 16	B B B	14 19 23	B B C	14 18 19	B B B	14 18 18	B B B
6. Texas St/Webster St	Fairfield	Signal	AM PM SAT	16 17 16	B B B	17 20 20	B B B	16 19 18	B B B	16 18 18	B B B
7. Woolner Ave/Beck Ave	Fairfield	Signal	AM PM SAT	21 14 16	C B B	22 15 16	C B B	21 15 15	C B B	22 15 16	C B B
8. Hwy 12/Beck Ave	Caltrans	Signal	AM PM SAT	56 52 30	E D C	62 62 42	E E D	60 58 40	E E D	60 56 39	E E D
9. Hwy 12/Pennsylvania Ave	Caltrans	Signal	AM PM SAT	44 43 27	D D C	>80 >80 >80	F F F	>80 >80 >80	F F F	>80 >80 >80	F F F
10. Hwy 12/Marina Blvd	Caltrans	Signal	AM PM SAT	40 24 18	D C B	43 25 19	D C B	42 25 18	D C B	42 25 18	D C B
11. Hwy 12/Sunset Ave	Caltrans	Signal	AM PM SAT	40 31 38	D C D	40 31 37	D C D	40 31 37	D C D	40 31 37	D C D
12. Cordelia Rd/Beck Ave	Fairfield	TWSC	AM PM SAT	10 12 9	A B A	11 15 10	B B B	11 14 10	B B B	11 14 10	B B A
13. Cordelia Rd/Pennsylvania	Suisun City	TWSC	AM PM SAT	10 12 10	A B A	13 >50 19	B F C	12 34 15	B C C	12 30 14	B C B
14. Cordelia Rd/Main St	Suisun City	All-way	AM PM SAT	7 9 8	A A A	8 10 9	A A A	7 9 8	A A A	7 9 8	A A A
15. Lotz Way/Civic Center Blvd	Caltrans	All-way	AM PM SAT	8 10 11	A A B	9 12 11	A B B	9 12 11	A B B	9 12 11	A B B
16. Lotz Way/Main St	Suisun City	Signal	AM PM SAT	13 12 9	B B A	12 13 13	B B B	12 13 12	B B B	12 13 12	B B B
17. Driveway 1/Cordelia Rd	Project	TWSC	AM PM SAT	N/A N/A N/A	N/A N/A N/A	11 13 10	B B B	10 13 10	B B B	10 13 10	B B B
18. Driveway 2/Cordelia Rd.	Project	TWSC	AM PM SAT	N/A N/A N/A	N/A N/A N/A	11 15 11	B B B	10 13 10	B B B	10 13 10	B B B
19. Driveway 3/Pennsylvania	Project	TWSC	AM PM SAT	N/A N/A N/A	N/A N/A N/A	12 23 21	B C C	11 14 13	B B B	11 14 12	B B B
20. Driveway 4/Pennsylvania	Project	TWSC	AM PM SAT	N/A N/A N/A	N/A N/A N/A	>50 >50 >50	F F F	17 >50 >50	C F F	16 >50 >50	C F F
21. Driveway 5/Pennsylvania	Project	TWSC	AM PM SAT	N/A N/A N/A	N/A N/A N/A	13 >50 >50	B F F	12 31 35	B D D	12 24 25	B C C
23. Driveway 4/Internal Project	Project	All-way	AM PM SAT	N/A N/A N/A	N/A N/A N/A	9 >50 >50	A F F	9 >50 >50	A F F	8 26 >50	A D F



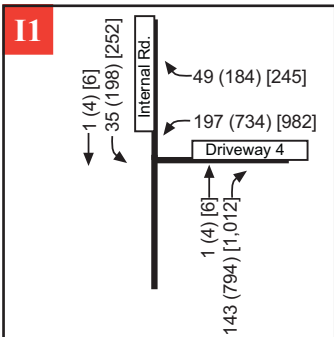
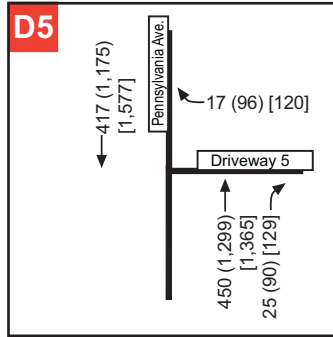
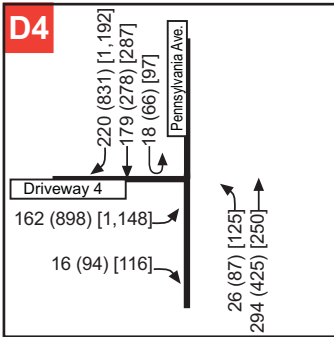
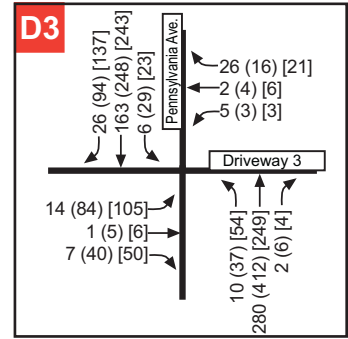
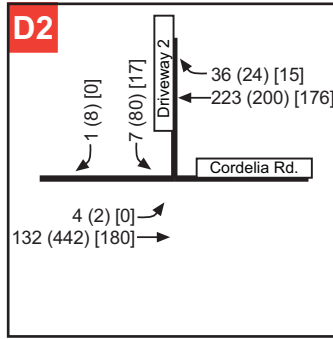
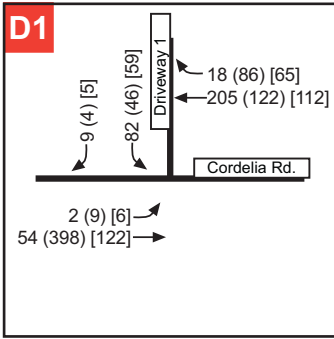
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EXISTING PLUS PROJECT
 BASE PROJECT

FIGURE 20A



LEGEND:

XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour



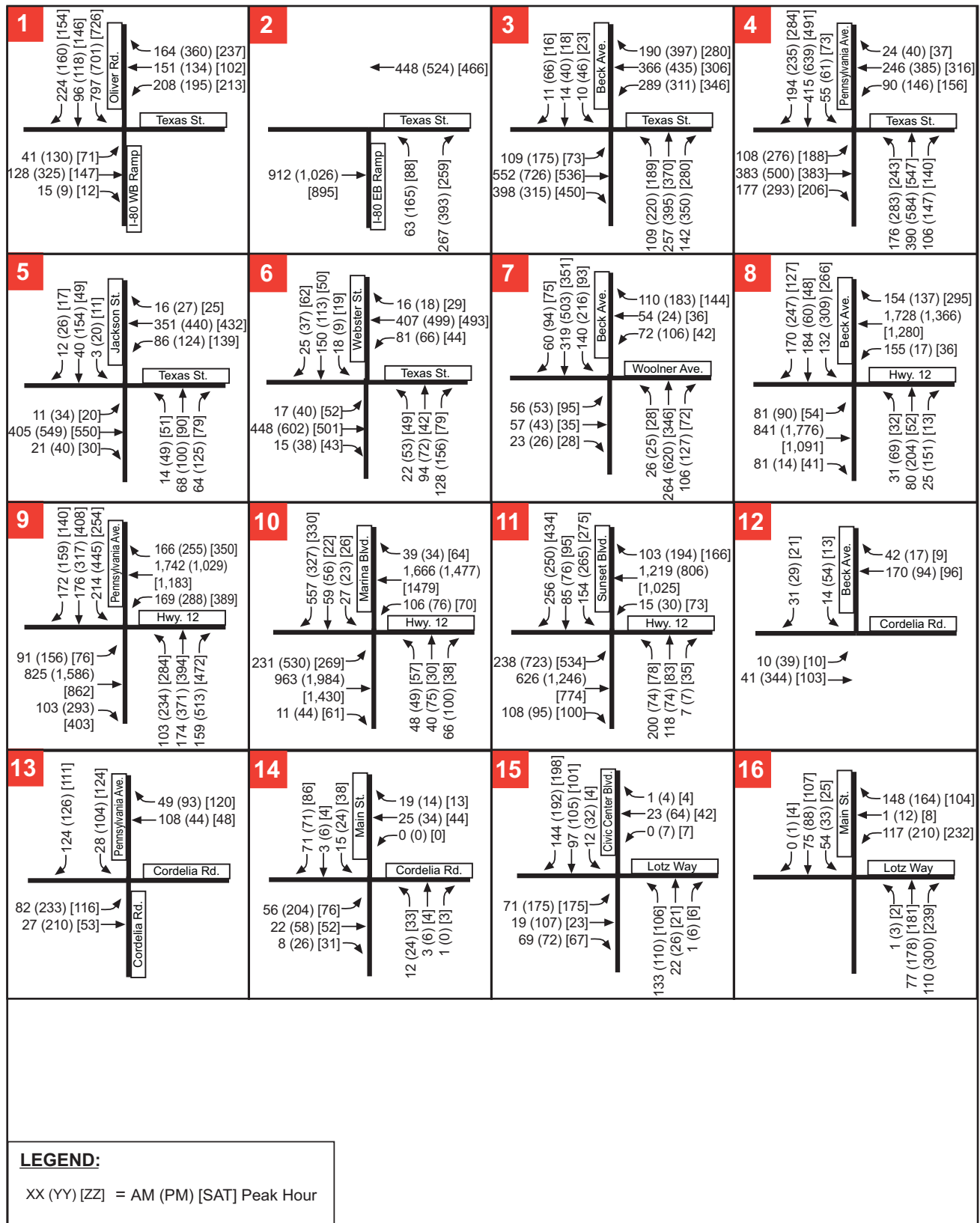
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**PROJECT DRIVEWAY VOLUMES
BASE PROJECT**

FIGURE 20B



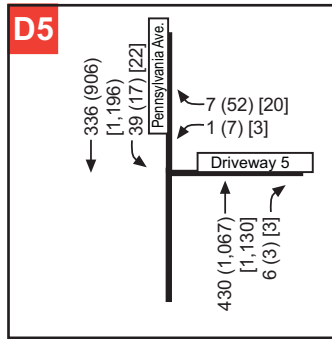
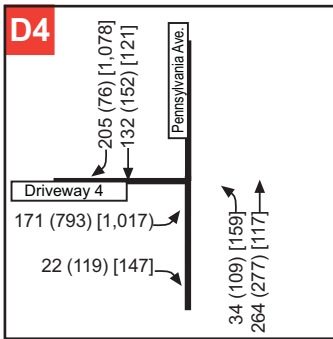
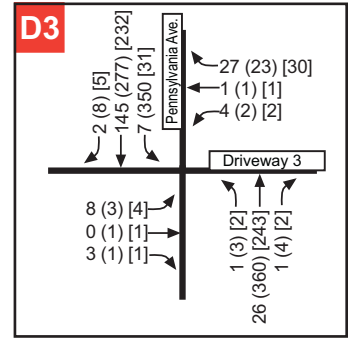
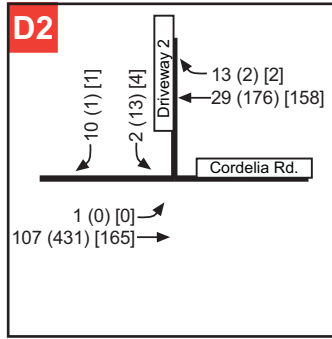
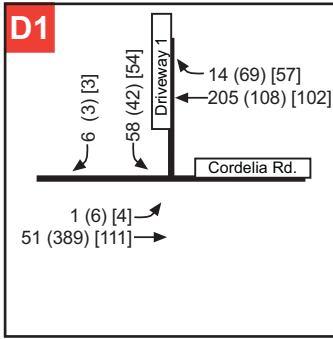
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EXISTING PLUS PROJECT
 ALTERNATIVE 1

FIGURE 21A



LEGEND:

XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour



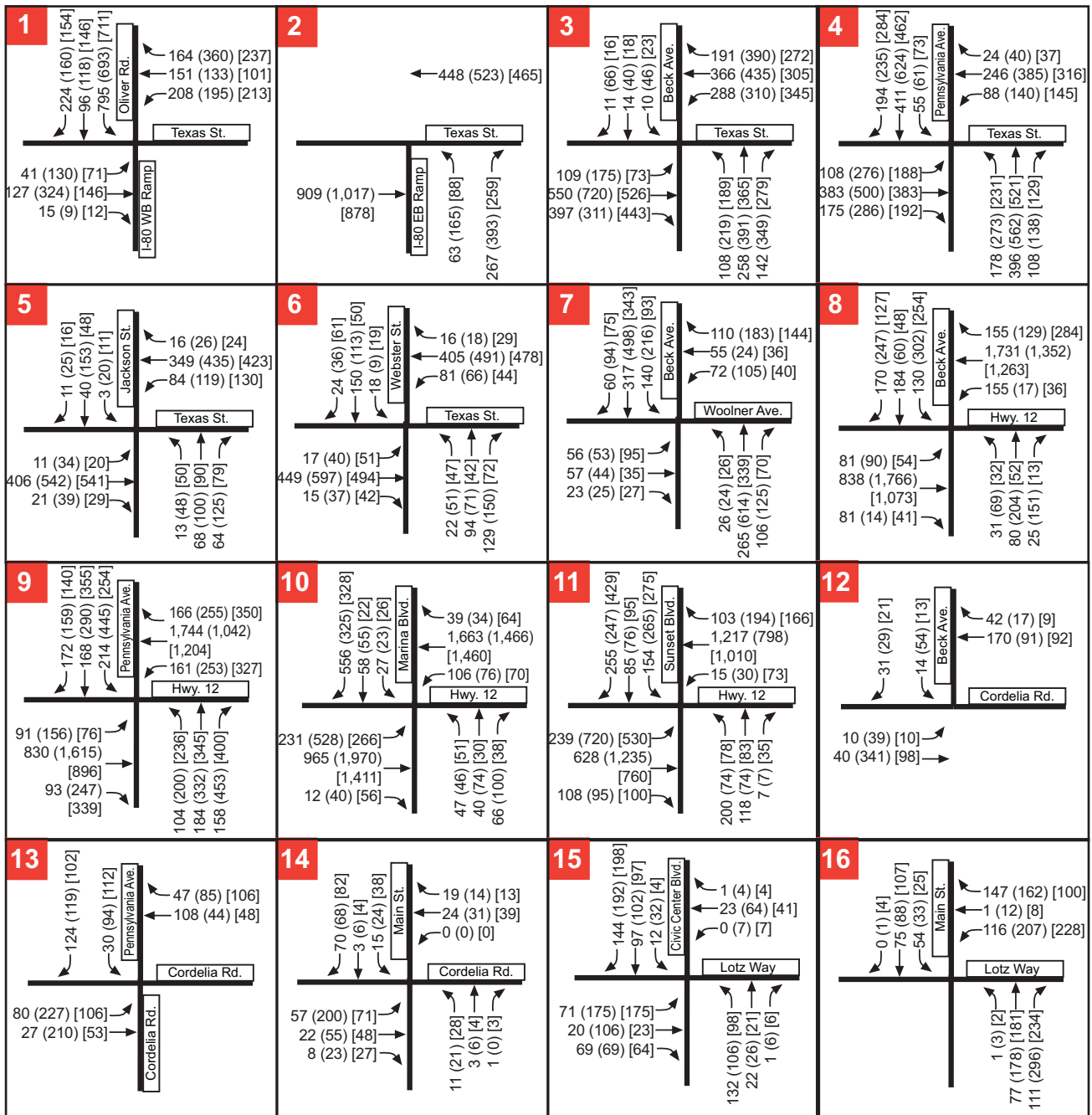
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EXISTING PLUS ALTERNATIVE 1

FIGURE 21B



LEGEND:
 XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour

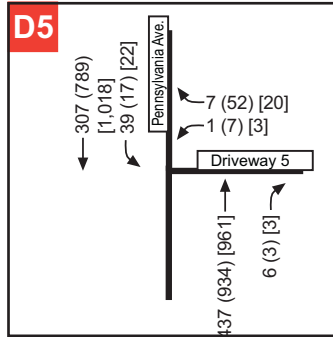
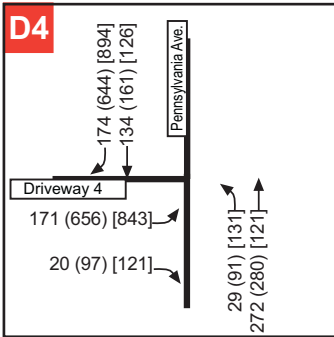
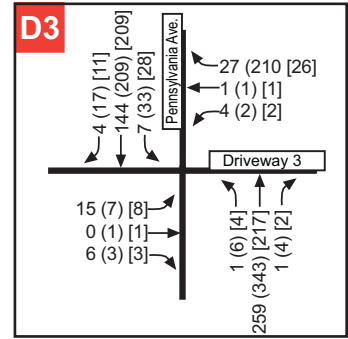
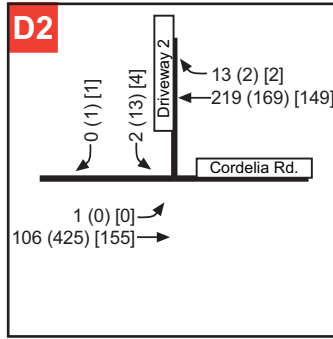
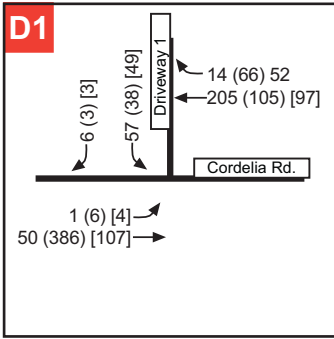


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**EXISTING PLUS PROJECT
 ALTERNATIVE 2**

FIGURE 22A



LEGEND:
 XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour



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EXISTING PLUS ALTERNATIVE 2

FIGURE 22B

BASE PROJECT IMPACTS AND MITIGATIONS

Texas Street/I-80 WB Ramp

Prior to the introduction of project trips, this intersection operates at LOS D during the PM peak hour (48 seconds of delay). This LOS currently exceeds the LOS C threshold that is generally applicable to Caltrans facilities. During the AM and Saturday peak hour, the intersection operates at LOS C with 32 seconds and 31 seconds of delay respectively. After the addition of project traffic, this intersection operates unacceptably at LOS E and D during the PM and Saturday peak hours, respectively. Since the addition of project traffic increases traffic volumes by 6 percent during the PM peak hour and causes the LOS to degrade from LOS C to LOS D during the Saturday peak hour, a significant impact occurs.

Impact A-1: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour. A significant impact also occurs during the Saturday peak hour since the project is responsible for a degradation of the LOS from LOS C to LOS D.

Mitigation A-1: Mitigating this impact will require the addition of an exclusive southbound left-turn lane. The project would fund the installation, which would require the approval of the California Department of Transportation. There appears to be sufficient right-of-way for the construction of this improvement. After implementation of this mitigation measure, the LOS at this intersection would be C or better during all periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

Texas Street/Beck Avenue

This intersection operates at LOS D during both the PM and Saturday periods with a delay of 42 seconds (PM) and 37 seconds (Saturday). This LOS currently exceeds the LOS C threshold that is generally applicable to Caltrans facilities. After the addition of project trips, the delay increases but the LOS remains at LOS D. Since the project is responsible for an increase in traffic volumes by 8 percent in the PM peak hour and 12 percent in the Saturday peak hour, a significant traffic impact occurs.

Impact A-2: The addition of project traffic causes an increase of more than three percent at intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-2: Mitigating this impact will require the modification of the westbound right-turn movement from permitted to free movement and optimization of the signal timings at this intersection. The project would fund the installation of this improvement, which would require the approval of the California Department of Transportation. After implementation of this mitigation measure, the intersection LOS would be LOS C during all periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require

approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

Texas Street/Pennsylvania Avenue

This intersection operates at LOS E in the PM peak hour prior to the introduction of project traffic, which exceeds the City of Fairfield's LOS D standard. This intersection operates at LOS C during the AM peak hour (32 seconds of delay) and LOS D during the Saturday peak hour (35 seconds of delay). After the addition of project trips, the intersection operates at LOS E with increased delay during the PM peak hour and degraded LOS E in the Saturday peak hour. Since the addition of project traffic increases traffic volumes by 27 percent during the PM peak hour and causes the LOS to degrade from LOS D to LOS E during the Saturday peak hour, a significant impact occurs.

Impact A-3: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM period. A significant impact also occurs during the Saturday period since the project is responsible for a degradation of the LOS from LOS D to LOS E.

Mitigation A-3: Mitigating this impact would require the addition of an exclusive right-turn lane and restriping the existing shared through/right-turn lane to exclusive through lane on the southbound approach. Based on a review of conditions at the intersection, there appears to be insufficient right-of-way for this improvement. This impact cannot be mitigated and the impact is significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as the City of Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

SR 12/Beck Avenue

This intersection operates at LOS E in the AM peak hour and LOS D in the PM peak hour prior to the introduction of project traffic, which exceeds the Caltrans' LOS C standard. The intersection operates at LOS C during the Saturday peak hour, which is an acceptable condition. After the addition of project trips, the intersection operations remain at LOS E with increased delay in the AM peak hour, degrade from LOS D to LOS E during the PM peak hour, and degrade from LOS C to LOS D during the Saturday peak hour. Since the addition of project traffic increases traffic volumes by more than 3 percent and 9 percent during the AM and PM peak hours and causes the LOS to degrade from LOS C to LOS D during the Saturday peak hour, a significant impact occurs.

Impact A-4: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the AM and PM peak hour. A significant impact also occurs during the Saturday period since the project is responsible for a degradation of the LOS from LOS C to LOS D.

Mitigation A-4: Mitigating this impact would require the addition of an exclusive right-turn lane and restriping the existing shared through/right-turn lane to exclusive through lane on the westbound approach and the addition of the second left-turn lane on the southbound approach. The project would fund the installation of this improvement, which would require the approval of the California Department of

Transportation. There appears to be adequate right-of-way for this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C during the AM and Saturday peak hours, and LOS D with decreased delay compared to existing conditions prior to the addition of project traffic during the PM peak hour.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

SR 12/Pennsylvania Avenue

This intersection operates at LOS D in the AM and PM peak hour prior to the introduction of project traffic, which exceeds the Caltrans' LOS C standard. The intersection operates at LOS C during the Saturday peak hour, which is an acceptable condition. After the addition of project trips, the intersection operations degrade to LOS F during the AM, PM, and Saturday peak hours. Since the project increases the traffic volumes at the intersection by 13 and 40 percent during the AM and PM peak hours and degrades the intersection operations from LOS C to LOS F during the Saturday peak hour, a significant impact also occurs

Impact A-5: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the AM and PM peak hour. A significant impact also occurs during the Saturday period since the project is responsible for a degradation of the LOS from LOS C to LOS F.

Mitigation A-5: Mitigating this impact would require the addition of lanes on all approaches to the intersection. Some of the improvements required would include the addition of a through lane on SR 12, additional lanes on the northbound approach to the intersection, additional westbound turn lanes, and other improvements. Alternately, one or more of the movements could require grade separation. An urban interchange would fully mitigate the deficient conditions at this intersection.

Implementing this mitigation measure would require extensive engineering studies and coordination between the project applicant, the City of Fairfield, Suisun City, and the California Department of Transportation. Constructing an interchange at this location could cost upwards of \$10 million, as documented by the SR 12 MIS completed in 2001. Given the difficulties in implementing this mitigation measure and the cost involved, full implementation cannot be assured in a timely fashion to mitigate the project impact.

Additionally, there is currently insufficient funding for this improvement and no regional mechanisms to collect money for this improvement. For example, Solano County does not have a countywide traffic impact fee program that would fund a regional improvement such as this. The City of Fairfield is a potential funding source for this interchange, although it is uncertain at this time whether there is sufficient funding from other parties to construct the interchange in conjunction with this project.

As a partial mitigation measure, we recommend that the project applicant reconstruct the northbound approach of the intersection to include two left-turn lanes, two through, and a free-right-turn lane. Two southbound receiving lanes should also be constructed. Implementing this mitigation measure would widen Pennsylvania Avenue to four travel lanes. We also recommend that Pennsylvania Avenue be constructed as a four-lane roadway along the project frontage. At a minimum this widening should extend to the project entrance at Driveway #4. In conjunction with the widening on Pennsylvania Avenue, an additional westbound left-turn lane on SR 12 should be provided to facilitate access to the project.

Since the full mitigation required to address this impact cannot be implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as the City of Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

SR 12/Sunset Avenue

This intersection operates at LOS D during the AM and Saturday peak hours prior to the introduction of project traffic. After the addition of project traffic, the LOS remains at D. However, LOS C is considered the acceptable threshold for this location so the intersection is judged to be operating at a deficient level. Since the project increases the traffic volumes by 10 percent at this deficient intersection during the Saturday peak hour, a significant impact occurs.

Impact A-6: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the Saturday peak hour.

Mitigation A-6: Mitigating this impact will require a traffic signal optimization. The project would be responsible for the implementation of this mitigation measure, which would require the approval of the California Department of Transportation. After implementation of this mitigation measure, the intersection LOS would be LOS C during all periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as the City of Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

Cordelia Road/Pennsylvania Avenue

This intersection, which operates under side street stop control, currently operates at LOS C or better during all peak hours. After the addition of project traffic, the intersection would operate at LOS F with delays exceeding 50 seconds during the PM peak hour. A significant impact occurs since the addition of project traffic causes the LOS to degrade from an acceptable LOS C to LOS F during the PM peak hour.

Impact A-7: The addition of project traffic causes the LOS during the PM peak hour to degrade from LOS C to LOS F.

Mitigation A-7: Mitigating this impact will require the construction of a traffic signal at this location. In addition, Pennsylvania Avenue will have to be widened to four travel lanes along the project frontage north and south of this location to provide appropriate transitions for these travel lanes. The design for this intersection is complicated by the proximate location to the adjacent railroad track. Improving Pennsylvania Avenue over the railroad tracks will require the approval of the California Public Utilities Commission (CPUC). The project would be responsible for the construction of this improvement. Prior to installation of a traffic signal, a complete signal warrant analysis should be conducted to verify the need

for a traffic signal. After implementation of this mitigation measure, the intersection LOS would be LOS B during all periods. This intersection is located in the City of Suisun City and the City has the ability to implement this mitigation measure as necessary.

Impact after Mitigation: Less than significant

Pennsylvania Avenue/Driveway #4

This intersection would provide primary access to the main commercial portion of the proposed development. For purposes of this analysis, this intersection is assumed to operate under side-street stop control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS F during all the peak hours. Since this LOS would exceed the City's LOS standard of C, a significant impact occurs.

Impact A-8: The intersection of Pennsylvania Avenue/Driveway #4 would operate at LOS F after the addition of project traffic during all the peak hours. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-8: Mitigating this impact will require widening of Pennsylvania Avenue and installation of a traffic signal at this location. Additional turn lanes, such as an additional left-turn lane outbound from the project, and an additional right-turn lane entering the project, would be needed at this intersection as well. The project would be responsible for widening Pennsylvania Avenue through this intersection and also modifying the site plan to provide the necessary turn lanes at the intersection. With these modifications, the intersection would operate at LOS B or better during all time periods. The recommended lane configuration for this intersection is addressed in the chapter discussing the project site access and circulation. This intersection is located in the City of Suisun City and the City has the ability to implement this mitigation measure as necessary.

Impact after Mitigation: Less than significant.

Pennsylvania Avenue/Driveway #5

This proposed intersection would be located to the south of SR 12 along Pennsylvania Avenue and would provide access to the Gilbert Parcel. For purposes of this analysis, this intersection is assumed to operate under side-street stop control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS F during both the PM and Saturday Peak hours. A significant impact occurs because this intersection would operate at LOS F after the addition of project traffic.

Impact A-9: The intersection of Pennsylvania Avenue/Driveway #5 would operate at LOS F after the addition of project traffic during the PM and Saturday peak hours. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-9: Mitigating this impact will require widening of Pennsylvania Avenue and changes in the access control at this location. This driveway will have to operate as right-in/right-out driveways only. We considered installing a traffic signal but cannot recommend a traffic signal given the distance to the signal at SR 12/Pennsylvania Avenue. Additionally, left-in movements cannot be allowed given the extensive queuing that is expected to occur at the SR 12/Pennsylvania intersection. With these modifications, the intersection would operate at LOS B or better during all time periods. This intersection is located in the City of Suisun City and the City has the ability to implement this mitigation measure as necessary.

Impact after Mitigation: Less than significant.

Driveway #4/Internal Roadway

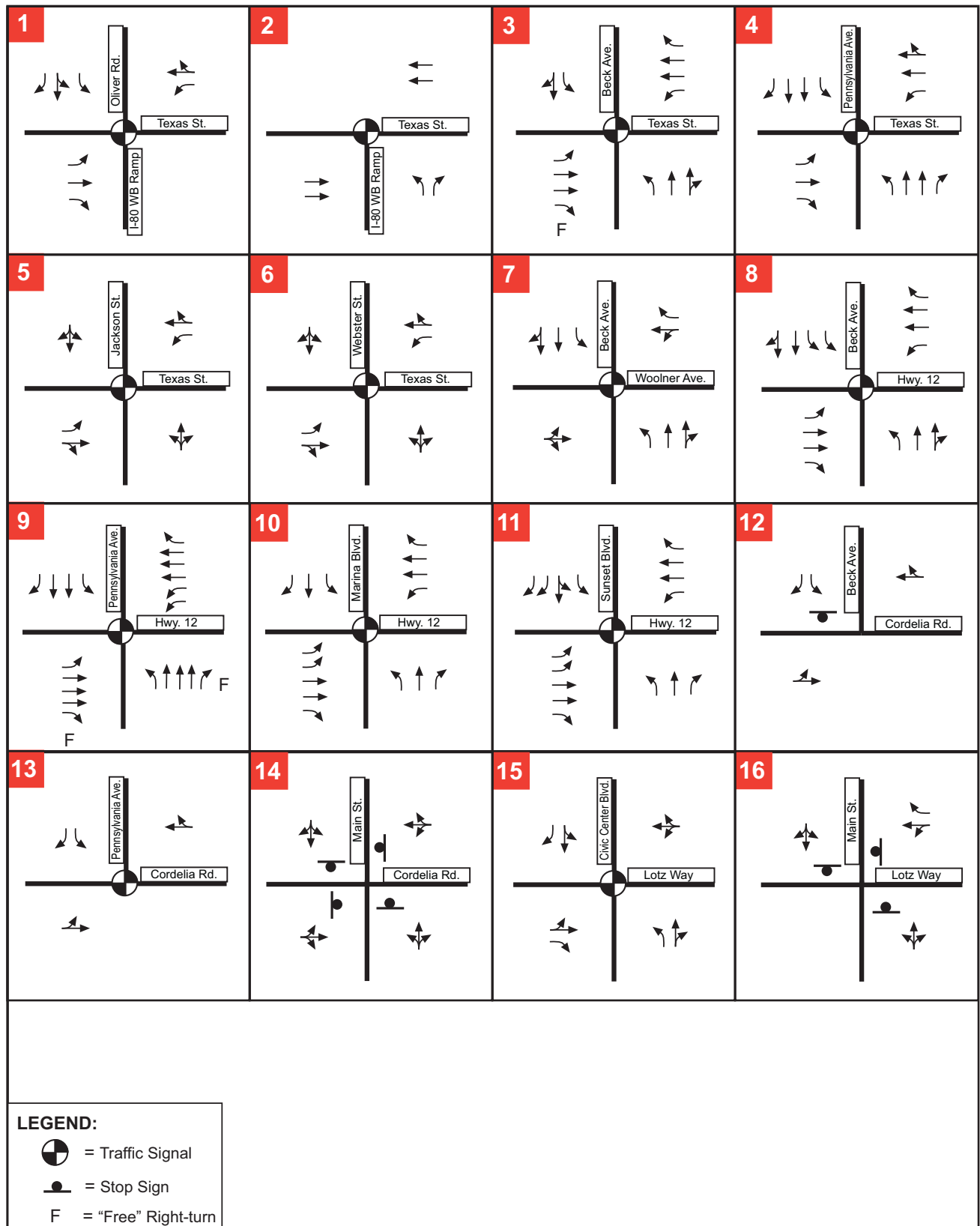
This intersection represents the connection between the major internal roadway on the main commercial site and Driveway #4. Nearly all of the traffic accessing the main commercial site will enter through this intersection while traveling to individual buildings. This analysis assumes that this intersection operates as an all-way stop intersection with one lane approaches in all directions. Based on this assumed configuration, the intersection will operate at LOS F during the PM and Saturday peak hours. This LOS exceeds the City of Suisun City's LOS C standard and a significant impact therefore occurs.

Impact A-10: The intersection of Driveway #4/Internal roadway would operate at LOS F after the addition of project traffic during the PM and Saturday peak hours. A significant impact occurs because this intersection would exceed the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-10: Mitigating this impact would require the addition of a traffic signal at this location. Additionally, the intersection will have to be modified to have two lanes on all approaches. The project applicant would be responsible for the construction of the acceleration/deceleration lane. With this improvement, the intersection would operate at LOS B or better during all time periods. This intersection is located in the City of Suisun City and the City has the ability to implement this mitigation measure as necessary.

Impact after Mitigation: Less than significant.

The mitigations measures needed to mitigate the Base Project impacts at the off-site intersections are shown on Figure 23A. The recommended lane configurations for the on-site intersections and project driveways are shown on Figure 23B.



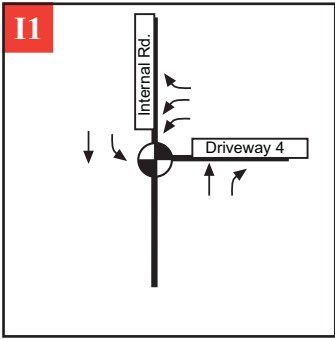
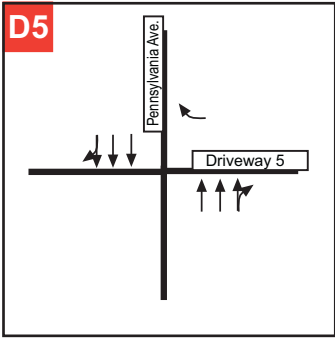
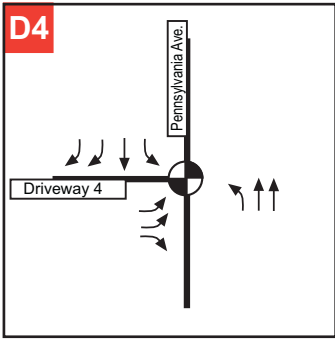
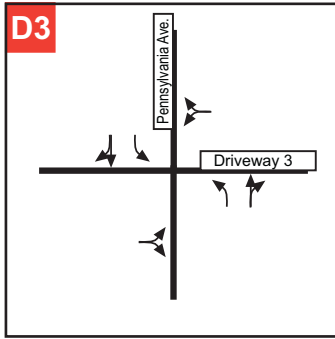
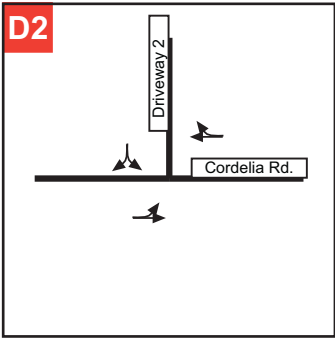
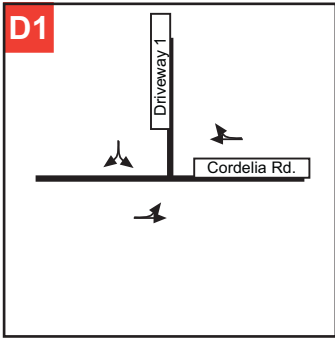
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January 2006
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EXISTING PLUS BASE PROJECT WITH MITIGATION

FIGURE 23A



LEGEND:



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Gentry-Suisun Annexation

**BASE PROJECT DRIVEWAY CONFIGURATIONS
(EXISTING PLUS APPROVED)**

FIGURE 23B

ALTERNATIVE 1 IMPACTS AND MITIGATIONS

Texas Street/I-80 WB Ramp

Prior to the introduction of project trips, this intersection operates at LOS D during the PM peak hour (48 seconds of delay). This LOS currently exceeds the LOS C threshold that is generally applicable to Caltrans facilities. During the AM and Saturday peak hour, the intersection operates at LOS C with 32 seconds and 31 seconds of delay respectively. After the addition of project traffic, this intersection operates unacceptably at LOS E and D during the PM and Saturday peak hours, respectively. Since the addition of project traffic increases traffic volumes by 5 percent during the PM peak hour and causes the LOS to degrade from LOS C to LOS D during the Saturday peak hour, a significant impact occurs.

Impact A-1: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour. A significant impact also occurs during the Saturday peak hour since the project is responsible for a degradation of the LOS from LOS C to LOS D.

Mitigation A-1: Mitigating this impact will require the addition of an exclusive southbound left-turn lane. The project would fund the installation, which would require the approval of the California Department of Transportation. There appears to be sufficient right-of-way for the construction of this improvement. After implementation of this mitigation measure, the LOS at this intersection would be C or better during all periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

Texas Street/Beck Avenue

This intersection operates at LOS D during both the PM and Saturday periods with a delay of 42 seconds (PM) and 37 seconds (Saturday). This LOS currently exceeds the LOS C threshold that is generally applicable to Caltrans facilities. After the addition of project trips, the delay increases but the LOS remains at LOS D. Since the project is responsible for an increase in traffic volumes by 6 percent in the PM peak hour and 9 percent in the Saturday peak hour, a significant traffic impact occurs.

Impact A-2: The addition of project traffic causes an increase of more than three percent at intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-2: Mitigating this impact will require the modification of the westbound right-turn movement from permitted to free movement and optimization of the signal timings at this intersection. The project would fund the installation of this improvement, which would require the approval of the California Department of Transportation. There appears to be adequate right-of-way for this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C during all periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require

approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

Texas Street/Pennsylvania Avenue

This intersection operates at LOS E in the PM peak hour prior to the introduction of project traffic, which exceeds the City of Fairfield's LOS D standard. This intersection operates at LOS C during the AM peak hour (32 seconds of delay) and LOS D during the Saturday peak hour (35 seconds of delay). After the addition of project trips, the intersection operates at LOS E with increased delay during the PM peak hour. Since the addition of project traffic increases traffic volumes by 20 percent during the PM peak hour, a significant impact occurs.

Impact A-3: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM period.

Mitigation A-3: Mitigating this impact would require the addition of an exclusive right-turn lane and restriping the existing shared through/right-turn lane to exclusive through lane on the southbound approach. Based on a review of conditions at the intersection, there appears to be insufficient right-of-way for this improvement. This impact cannot be mitigated and the impact is significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

SR 12/Beck Avenue

This intersection operates at LOS E in the AM peak hour and LOS D in the PM peak hour prior to the introduction of project traffic, which exceeds the Caltrans' LOS C standard. The intersection operates at LOS C during the Saturday peak hour, which is an acceptable condition. After the addition of project trips, the intersection operations remain at LOS E with increased delay in the AM peak hour, degrade from LOS D to LOS E during the PM peak hour, and degrade from LOS C to LOS D during the Saturday peak hour. Since the addition of project traffic increases traffic volumes by 7 percent during the PM peak hour and causes the LOS to degrade from LOS C to LOS D during the Saturday peak hour, a significant impact occurs.

Impact A-4: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour. A significant impact also occurs during the Saturday period since the project is responsible for a degradation of the LOS from LOS C to LOS D.

Mitigation A-4: Mitigating this impact would require the addition of an exclusive right-turn lane and restriping the existing shared through/right-turn lane to exclusive through lane on the westbound approach and the addition of the second left-turn lane on the southbound approach. The project would fund the installation of this improvement, which would require the approval of the California Department of Transportation. There appears to be adequate right-of-way for this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require

approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

SR 12/Pennsylvania Avenue

This intersection operates at LOS D in the AM and PM peak hour prior to the introduction of project traffic, which exceeds the Caltrans' LOS C standard. The intersection operates at LOS C during the Saturday peak hour, which is an acceptable condition. After the addition of project trips, the intersection operations degrade to LOS F during the AM, PM, and Saturday peak hours. Since the project increases the traffic volumes at the intersection by 11 and 29 percent during the AM and PM peak hours and degrades the intersection operations from LOS C to LOS F during the Saturday peak hour, a significant impact also occurs

Impact A-5: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the AM and PM peak hour. A significant impact also occurs during the Saturday period since the project is responsible for a degradation of the LOS from LOS C to LOS F.

Mitigation A-5: Mitigating this impact would require the addition of lanes on all approaches to the intersection. These additional lanes would include turn lanes on the eastbound and westbound approaches and additional through lanes on Pennsylvania Avenue. With these improvements, this intersection would operate at LOS D, which would provide acceptable level of operations and mitigate the impacts of the project. No impact is judged to occur since the delay would be less than the existing condition, if the proposed improvements are implemented.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

SR 12/Sunset Avenue

This intersection operates at LOS D during the AM and Saturday peak hours prior to the introduction of project traffic. After the addition of project traffic, the LOS remains at D. However, LOS C is considered the acceptable threshold for this location so the intersection is judged to be operating at a deficient level. Since the project increases the traffic volumes by 8 percent at this deficient intersection during the Saturday peak hour, a significant impact occurs.

Impact A-6: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the Saturday peak hour.

Mitigation A-6: Mitigating this impact will require a traffic signal optimization. The project would be responsible for the implementation of this mitigation measure, which would require the approval of the California Department of Transportation. After implementation of this mitigation measure, the intersection LOS would be LOS C during all periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require

approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

Cordelia Road/Pennsylvania Avenue

This intersection, which operates under side street stop control, currently operates at LOS C or better during all peak hours. After the addition of project traffic, the intersection would operate at LOS D during the PM peak hour. A significant impact occurs since the addition of project traffic causes the LOS to degrade from an acceptable LOS C to LOS D during the PM peak hour.

Impact A-7: The addition of project traffic causes the LOS during the PM peak hour to degrade from LOS C to LOS D.

Mitigation A-7: Mitigating this impact will require the construction of a traffic signal at this location. In addition, Pennsylvania Avenue will have to be widened to four travel lanes along the project frontage north and south of this location to provide appropriate transitions for these travel lanes. The design for this intersection is complicated by the proximate location to the adjacent railroad track. Improving Pennsylvania Avenue over the railroad tracks will require the approval of the California Public Utilities Commission (CPUC). The project would be responsible for the construction of this improvement. Prior to installation of a traffic signal, a complete signal warrant analysis should be conducted to verify the need for a traffic signal. After implementation of this mitigation measure, the intersection LOS would be LOS B during all periods. This intersection is located in the City of Suisun City and the City has the ability to implement this mitigation measure as necessary.

Impact after Mitigation: Less than significant

Pennsylvania Avenue/Driveway #4

This intersection would provide primary access to the main commercial portion of the proposed development. For purposes of this analysis, this intersection is assumed to operate under side-street stop control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS F during the PM and Saturday peak hours. Since this LOS would exceed the City's LOS standard of C, a significant impact occurs.

Impact A-8: The intersection of Pennsylvania Avenue/Driveway #4 would operate at LOS F after the addition of project traffic during the PM and Saturday peak hours. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-8: Mitigating this impact will require widening of Pennsylvania Avenue and installation of a traffic signal at this location. Additional turn lanes, such as an additional left-turn lane outbound from the project, and an additional right-turn lane entering the project, would be needed at this intersection as well. The project would be responsible for widening Pennsylvania Avenue through this intersection and also modifying the site plan to provide the necessary turn lanes at the intersection. With these modifications, the intersection would operate at LOS B or better during all time periods. This intersection is located in the City of Suisun City and the City has the ability to implement this mitigation measure as necessary.

Impact after Mitigation: Less than significant.

Pennsylvania Avenue/Driveway #5

This proposed intersection would be located to the south of SR 12 along Pennsylvania Avenue and would provide access to the Gilbert Parcel. For purposes of this analysis, this intersection is assumed to operate under side-street stop control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS D during both the PM and Saturday Peak hours. A significant impact occurs because this intersection would operate at LOS D after the addition of project traffic.

Impact A-9: The intersection of Pennsylvania Avenue/Driveway #5 would operate at LOS D after the addition of project traffic during the PM and Saturday peak ours. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-9: Mitigating this impact will require widening of Pennsylvania Avenue and changes in the access control at this location. This driveway will have to operate as right-in/right-out driveways only. We considered installing a traffic signal but cannot recommend a traffic signal given the distance to the signal at SR 12/Pennsylvania Avenue. Additionally, left-in movements cannot be allowed given the extensive queuing that is expected to occur at the SR 12/Pennsylvania intersection. With these modifications, the intersection would operate at LOS C during all time periods. This intersection is located in the City of Suisun City and the City has the ability to implement this mitigation measure as necessary.

Impact after Mitigation: Less than significant.

Driveway #4/Internal Roadway

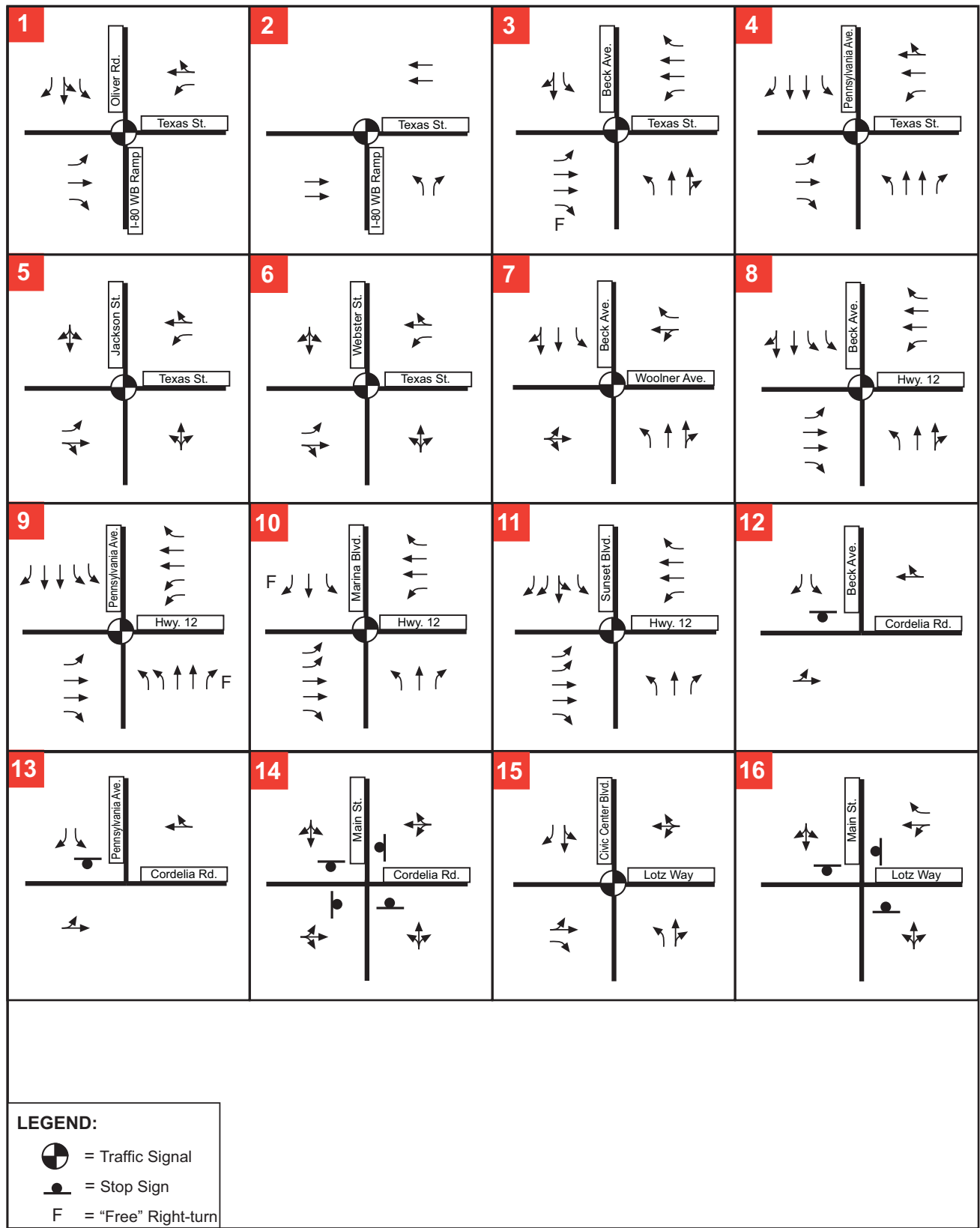
This intersection represents the connection between the major internal roadway on the main commercial site and Driveway #4. Nearly all of the traffic accessing the main commercial site will enter through this intersection while traveling to individual buildings. This analysis assumes that this intersection operates as an all-way stop intersection with one lane approaches in all directions. Based on this assumed configuration, the intersection will operate at LOS F during the PM and Saturday peak hours. This LOS exceeds the City of Suisun City's LOS C standard and a significant impact therefore occurs.

Impact A-10: The intersection of Driveway #4/Internal roadway would operate at LOS F after the addition of project traffic during the PM and Saturday peak hours. A significant impact occurs because this intersection would exceed the LOS C threshold which is considered acceptable by Suisun City.



Mitigation A-10: Mitigating this impact would require the addition of a traffic signal at this location. Additionally, the intersection will have to be modified to have two lanes on all approaches. The project applicant would be responsible for the construction of the acceleration/deceleration lane. With this improvement, the intersection would operate at LOS B or better during all time periods. This intersection is located in the City of Suisun City and the City has the ability to implement this mitigation measure as necessary.

Impact after Mitigation: Less than significant.

The mitigation measures required to fully mitigate these impacts are shown on Figure 24A (off-site intersections) and Figure 24B (on-site intersections).



LEGEND:

-  = Traffic Signal
-  = Stop Sign
- F = "Free" Right-turn



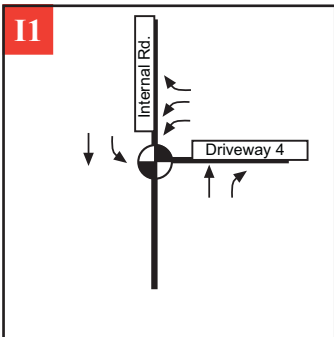
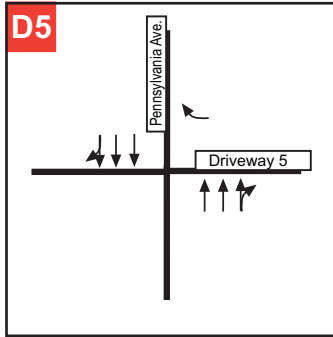
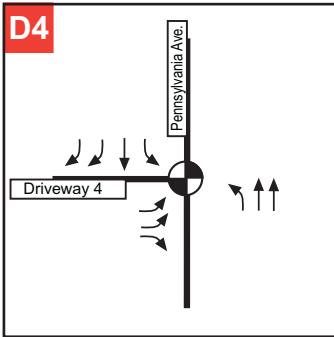
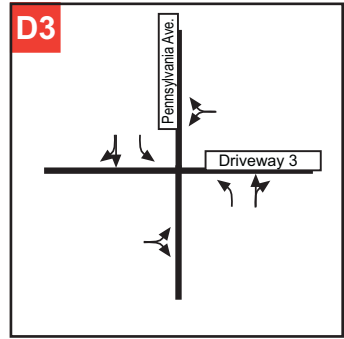
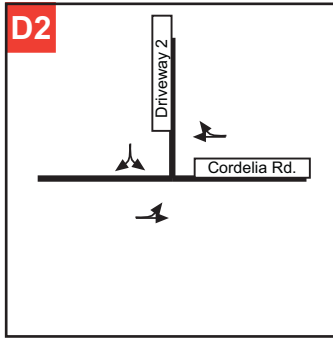
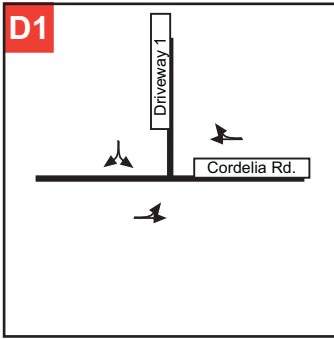
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January 2006
2192-24A

Gentry-Suisun Annexation

**EXISTING PLUS PROJECT WITH MITIGATION
ALTERNATIVE 1**

FIGURE 24A



LEGEND:



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February 2006
2192-24B

Gentry-Suisun Annexation

**ALTERNATIVE 1 DRIVEWAY CONFIGURATIONS
(EXISTING PLUS APPROVED)**

FIGURE 24B

ALTERNATIVE 2 IMPACTS AND MITIGATIONS

Texas Street/I-80 WB Ramp

Prior to the introduction of project trips, this intersection operates at LOS D during the PM peak hour (48 seconds of delay). This LOS currently exceeds the LOS C threshold that is generally applicable to Caltrans facilities. During the AM and Saturday peak hour, the intersection operates at LOS C with 32 seconds and 31 seconds of delay respectively. After the addition of project traffic, this intersection operates unacceptably at LOS E and D during the PM and Saturday peak hours, respectively. Since the addition of project traffic increases traffic volumes by 4 percent during the PM peak hour and causes the LOS to degrade from LOS C to LOS D during the Saturday peak hour, a significant impact occurs.

Impact A-1: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour. A significant impact also occurs during the Saturday peak hour since the project is responsible for a degradation of the LOS from LOS C to LOS D.

Mitigation A-1: Mitigating this impact will require the addition of an exclusive southbound left-turn lane. The project would fund the installation, which would require the approval of the California Department of Transportation. There appears to be sufficient right-of-way for the construction of this improvement. After implementation of this mitigation measure, the LOS at this intersection would be C or better during all periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

Texas Street/Beck Avenue

This intersection operates at LOS D during both the PM and Saturday periods with a delay of 42 seconds (PM) and 37 seconds (Saturday). This LOS currently exceeds the LOS C threshold that is generally applicable to Caltrans facilities. After the addition of project trips, the delay increases but the LOS remains at LOS D. Since the project is responsible for an increase in traffic volumes by 5 percent in the PM peak hour and 8 percent in the Saturday peak hour, a significant traffic impact occurs.

Impact A-2: The addition of project traffic causes an increase of more than three percent at intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-2: Mitigating this impact will require the modification of the westbound right-turn movement from permitted to free movement and optimization of the signal timings at this intersection. The project would fund the installation of this improvement, which would require the approval of the California Department of Transportation. There appears to be adequate right-of-way for this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C during all periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require

approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

Texas Street/Pennsylvania Avenue

This intersection operates at LOS E in the PM peak hour prior to the introduction of project traffic, which exceeds the City of Fairfield's LOS D standard. This intersection operates at LOS C during the AM peak hour (32 seconds of delay) and LOS D during the Saturday peak hour (35 seconds of delay). After the addition of project trips, the intersection operates at LOS E with increased delay during the PM peak hour. Since the addition of project traffic increases traffic volumes by 17 percent during the PM peak hour, a significant impact occurs.

Impact A-3: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM period.

Mitigation A-3: Mitigating this impact would require the addition of an exclusive right-turn lane and restriping the existing shared through/right-turn lane to exclusive through lane on the southbound approach. Based on a review of conditions at the intersection, there appears to be insufficient right-of-way for this improvement. This impact cannot be mitigated and the impact is significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as the City of Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

SR 12/Beck Avenue

This intersection operates at LOS E in the AM peak hour and LOS D in the PM peak hour prior to the introduction of project traffic, which exceeds the Caltrans' LOS C standard. The intersection operates at LOS C during the Saturday peak hour, which is an acceptable condition. After the addition of project trips, the intersection operations remain at LOS E with increased delay in the AM peak hour, degrade from LOS D to LOS E during the PM peak hour, and degrade from LOS C to LOS D during the Saturday peak hour. Since the addition of project traffic increases traffic volumes by 6 percent during the PM peak hour and causes the LOS to degrade from LOS C to LOS D during the Saturday peak hour, a significant impact occurs.

Impact A-4: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour. A significant impact also occurs during the Saturday period since the project is responsible for a degradation of the LOS from LOS C to LOS D.

Mitigation A-4: Mitigating this impact would require the addition of an exclusive right-turn lane and restriping the existing shared through/right-turn lane to exclusive through lane on the westbound approach and the addition of the second left-turn lane on the southbound approach. The project would fund the installation of this improvement, which would require the approval of the California Department of Transportation. There appears to be adequate right-of-way for this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C during all periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as the City of Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

SR 12/Pennsylvania Avenue

This intersection operates at LOS D in the AM and PM peak hour prior to the introduction of project traffic, which exceeds the Caltrans' LOS C standard. The intersection operates at LOS C during the Saturday peak hour, which is an acceptable condition. After the addition of project trips, the intersection operations degrade to LOS F during the AM, PM, and Saturday peak hours. Since the project increases the traffic volumes at the intersection by 11 and 25 percent during the AM and PM peak hours and degrades the intersection operations from LOS C to LOS F during the Saturday peak hour, a significant impact also occurs

Impact A-5: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the AM and PM peak hour. A significant impact also occurs during the Saturday period since the project is responsible for a degradation of the LOS from LOS C to LOS F.

Mitigation A-5: Mitigating this impact would require the addition of lanes on all approaches to the intersection. These additional lanes would include turn lanes on the eastbound and westbound approaches and additional through lanes on Pennsylvania Avenue. With these improvements, this intersection would operate at LOS D, which would provide acceptable level of operations and mitigate the impacts of the project. No impact is judged to occur since the delay would be less than the existing condition, if the proposed improvements are implemented.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

SR 12/Sunset Avenue

This intersection operates at LOS D during the AM and Saturday peak hours prior to the introduction of project traffic. After the addition of project traffic, the LOS remains at D. However, LOS C is considered the acceptable threshold for this location so the intersection is judged to be operating at a deficient level. Since the project increases the traffic volumes by 6 percent at this deficient intersection during the Saturday peak hour, a significant impact occurs.

Impact A-6: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the Saturday peak hour.

Mitigation A-6: Mitigating this impact will require a traffic signal optimization. The project would be responsible for the implementation of this mitigation measure, which would require the approval of the California Department of Transportation. After implementation of this mitigation measure, the intersection LOS would be LOS C during all periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

Cordelia Road/Pennsylvania Avenue

This intersection, which operates under side street stop control, currently operates at LOS C or better during all peak hours. After the addition of project traffic, the intersection would operate at LOS D during the PM peak hour. A significant impact occurs since the addition of project traffic causes the LOS to degrade from an acceptable LOS C to LOS D during the PM peak hour.

Impact A-7: The addition of project traffic causes the LOS during the PM peak hour to degrade from LOS C to LOS D.

Mitigation A-7: Mitigating this impact will require the construction of a traffic signal at this location. In addition, Pennsylvania Avenue will have to be widened to four travel lanes along the project frontage north and south of this location to provide appropriate transitions for these travel lanes. The design for this intersection is complicated by the proximate location to the adjacent railroad track. Improving Pennsylvania Avenue over the railroad tracks will require the approval of the California Public Utilities Commission (CPUC). The project would be responsible for the construction of this improvement. Prior to installation of a traffic signal, a complete signal warrant analysis should be conducted to verify the need for a traffic signal. After implementation of this mitigation measure, the intersection LOS would be LOS B during all periods. This intersection is located in the City of Suisun City and any specified improvement does not require the approval of either Caltrans or the City of Fairfield.

Impact after Mitigation: Less than significant

Pennsylvania Avenue/Driveway #4

This intersection would provide primary access to the main commercial portion of the proposed development. For purposes of this analysis, this intersection is assumed to operate under side-street stop control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS F during the PM and Saturday peak hours. Since this LOS would exceed the City's LOS standard of C, a significant impact occurs.

Impact A-8: The intersection of Pennsylvania Avenue/Driveway #4 would operate at LOS F after the addition of project traffic during the PM and Saturday peak hours. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-8: Mitigating this impact will require widening of Pennsylvania Avenue and installation of a traffic signal at this location. Additional turn lanes, such as an additional left-turn lane outbound from the project, and an additional right-turn lane entering the project, would be needed at this intersection as well. The project would be responsible for widening Pennsylvania Avenue through this intersection and also modifying the site plan to provide the necessary turn lanes at the intersection. With these modifications, the intersection would operate at LOS B or better during all time periods. This intersection is located in the City of Suisun City and any specified improvement does not require the approval of either Caltrans or the City of Fairfield.

Impact after Mitigation: Less than significant.

Driveway #4/Internal Roadway

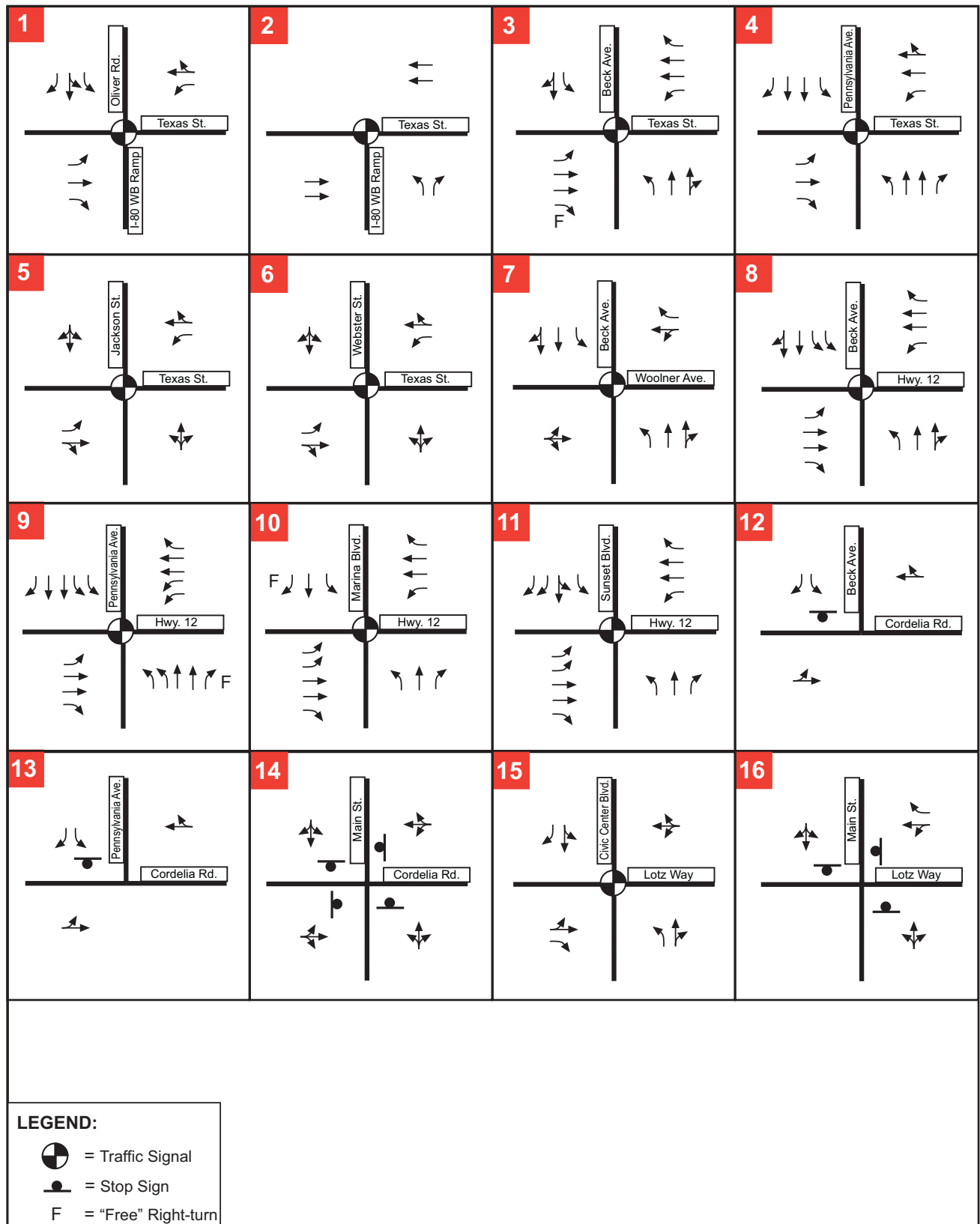
This intersection represents the connection between the major internal roadway on the main commercial site and Driveway #4. Nearly all of the traffic accessing the main commercial site will enter through this intersection while traveling to individual buildings. This analysis assumes that this intersection operates as an all-way stop intersection with one lane approaches in all directions. Based on this assumed configuration, the intersection will operate at LOS D during the PM peak hour and LOS F during the Saturday peak hour. This LOS exceeds the City of Suisun City's LOS C standard and a significant impact therefore occurs.

Impact A-9: The intersection of Driveway #4/Internal roadway would operate at LOS D and F after the addition of project traffic during the PM and Saturday peak hours, respectively. A significant impact occurs because this intersection would exceed the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-9: Mitigating this impact would require the addition of a traffic signal at this location. Additionally, the intersection will have to be modified to have two lanes on all approaches. The project applicant would be responsible for the construction of the acceleration/deceleration lane. With this improvement, the intersection would operate at LOS B or better during all time periods. This intersection is located in the City of Suisun City and any specified improvement does not require the approval of either Caltrans or the City of Fairfield.

Impact after Mitigation: Less than significant.

The mitigation measures needed to mitigate these impacts are shown on Figure 25A (off-site intersections) and Figure 25B (on-site intersections).



LEGEND:

-  = Traffic Signal
-  = Stop Sign
- F = "Free" Right-turn



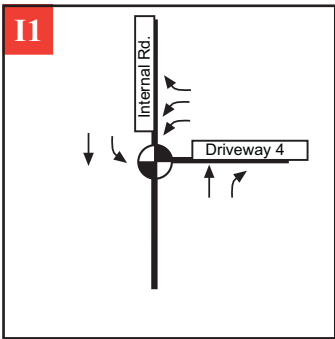
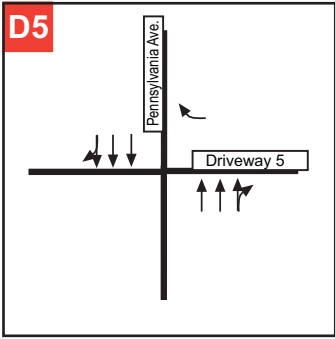
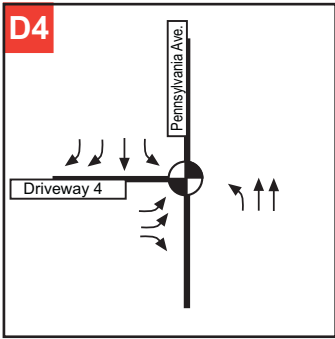
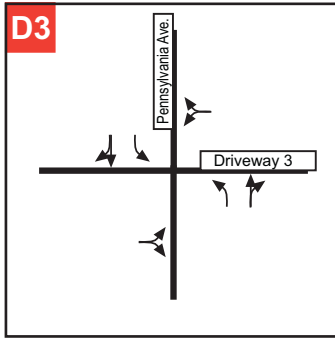
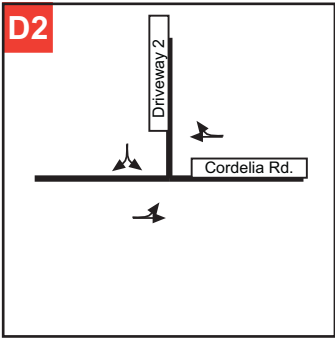
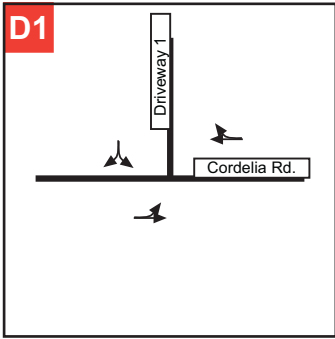
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**EXISTING PLUS PROJECT WITH MITIGATION
ALTERNATIVE 2**

FIGURE 25A



LEGEND:



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**ALTERNATIVE 2 DRIVEWAY CONFIGURATIONS
(EXISTING PLUS APPROVED)**

FIGURE 25B

7. PROJECT INTERSECTION IMPACTS- CUMULATIVE SCENARIO

This chapter represents traffic impacts associated with the Cumulative Scenario. This scenario represents existing traffic volumes, as well as additional traffic associated with proposed and planned developments within the City of Fairfield and the City of Suisun City. This chapter discusses the traffic volumes, the assumed improvements, the resulting intersection operations, and the project impacts. Any associated mitigations are presented as well.

TRAFFIC VOLUMES

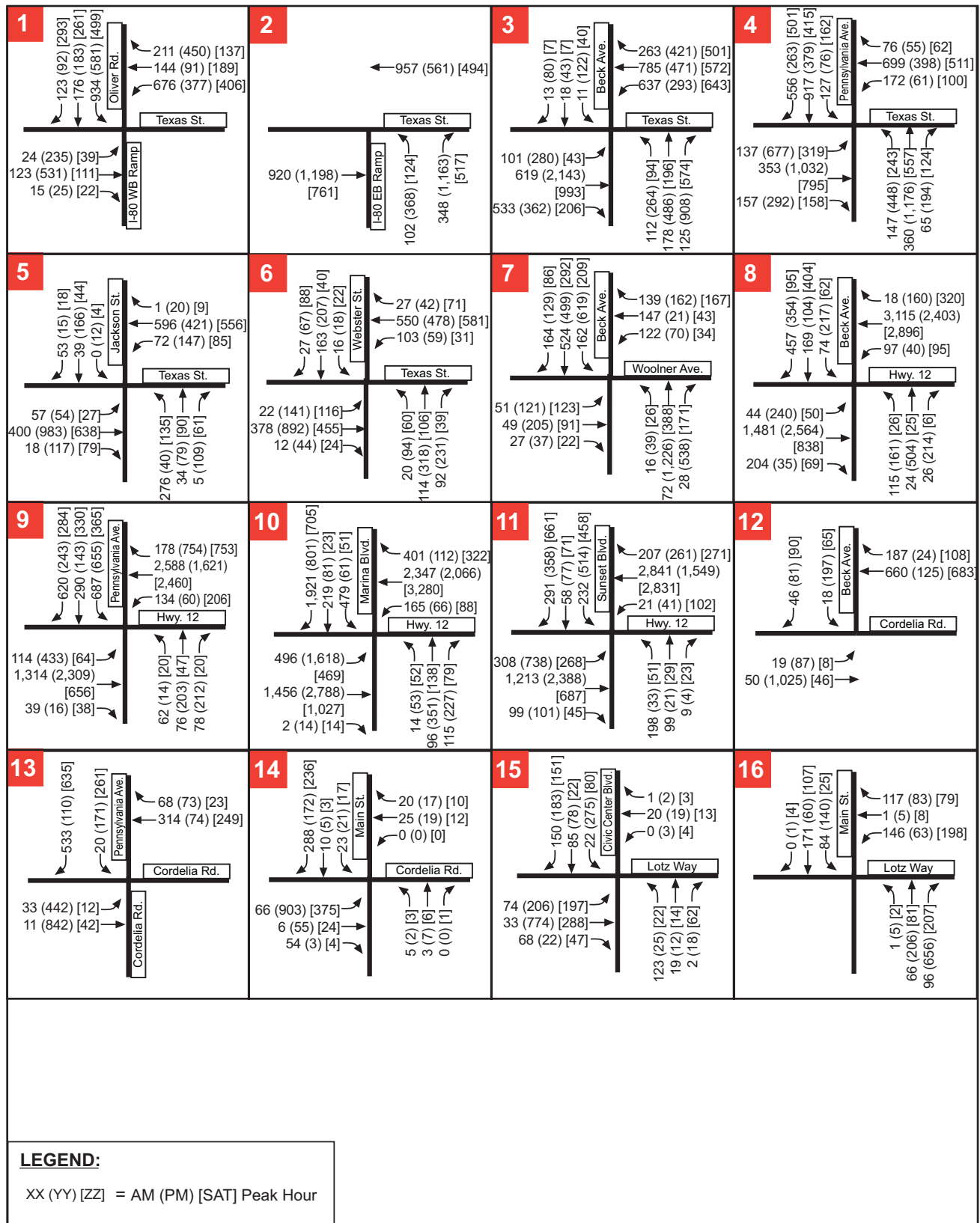
Given the anticipated growth within the study area, a travel demand model was selected as the most appropriate tool for use in developing the traffic volumes for the Cumulative Scenario. Based on a variety of considerations, the recently adopted Solano Transportation Authority (STA) regional travel demand was selected for use. A detailed description of the model selection process as well as checks of the regional model's land use and roadway network data is provided in the Appendix as Appendix D. This review concluded that the model was generally acceptable for use in preparing the forecasts, although several land use and roadway network changes were required. These changes are also documented in the memo provided in Appendix D.

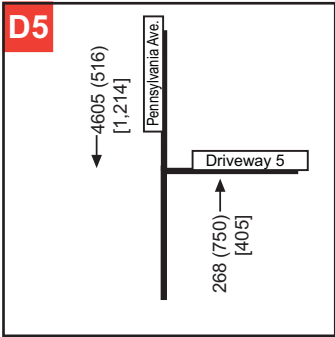
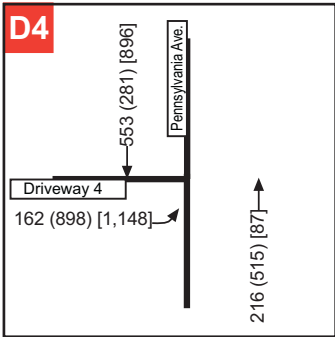
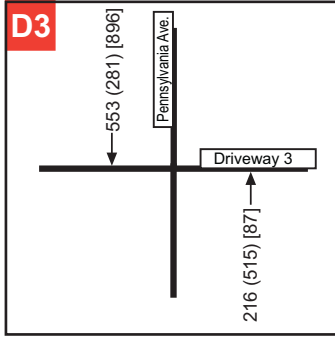
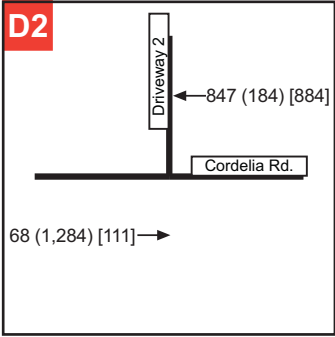
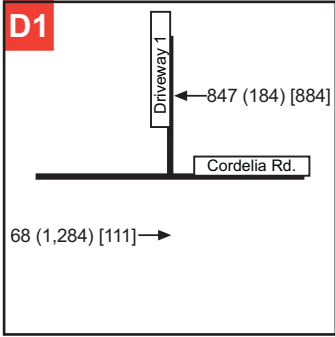
Using the results of this model, we developed forecasts for the three peak analysis periods using a furnessing process. As part of the furnessing process, the growth on a roadway segment is added to an approach and distributed to the various turning movements based on the existing turning percentages. This growth is then added to the existing traffic counts. Furnessing is often employed to develop traffic forecasts given that regional travel demand models often lack the necessary accuracy to provide accurate turning movement volumes. The furnessing process also ensures that traffic forecasts are equal to or higher than the existing traffic counts. For the Saturday forecasts, the growth for the AM and PM peak hours were averaged and added to the existing traffic counts.

The Background or No Project Traffic Volumes for the Cumulative Scenario volumes are shown on Figures 26A and 26B. The volumes which result from the addition of the Base Project traffic to the Background Volumes are presented on Figures 27A and 27B. Figures 28A and 28B represent the estimated traffic volumes which result from the addition of project traffic under Alternative 1. Alternative 2 traffic volumes are provided on Figures 29A and 29B.

ROADWAY IMPROVEMENTS

As stated in Chapter 5, there are a number of proposed improvements within the study area. For example, widening SR 12 from four to six lanes has been considered along with an urban interchange at SR 12/Pennsylvania Avenue. However, none of these proposed improvements are funded and are not assumed to be constructed in the Cumulative Scenario.





LEGEND:

XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour



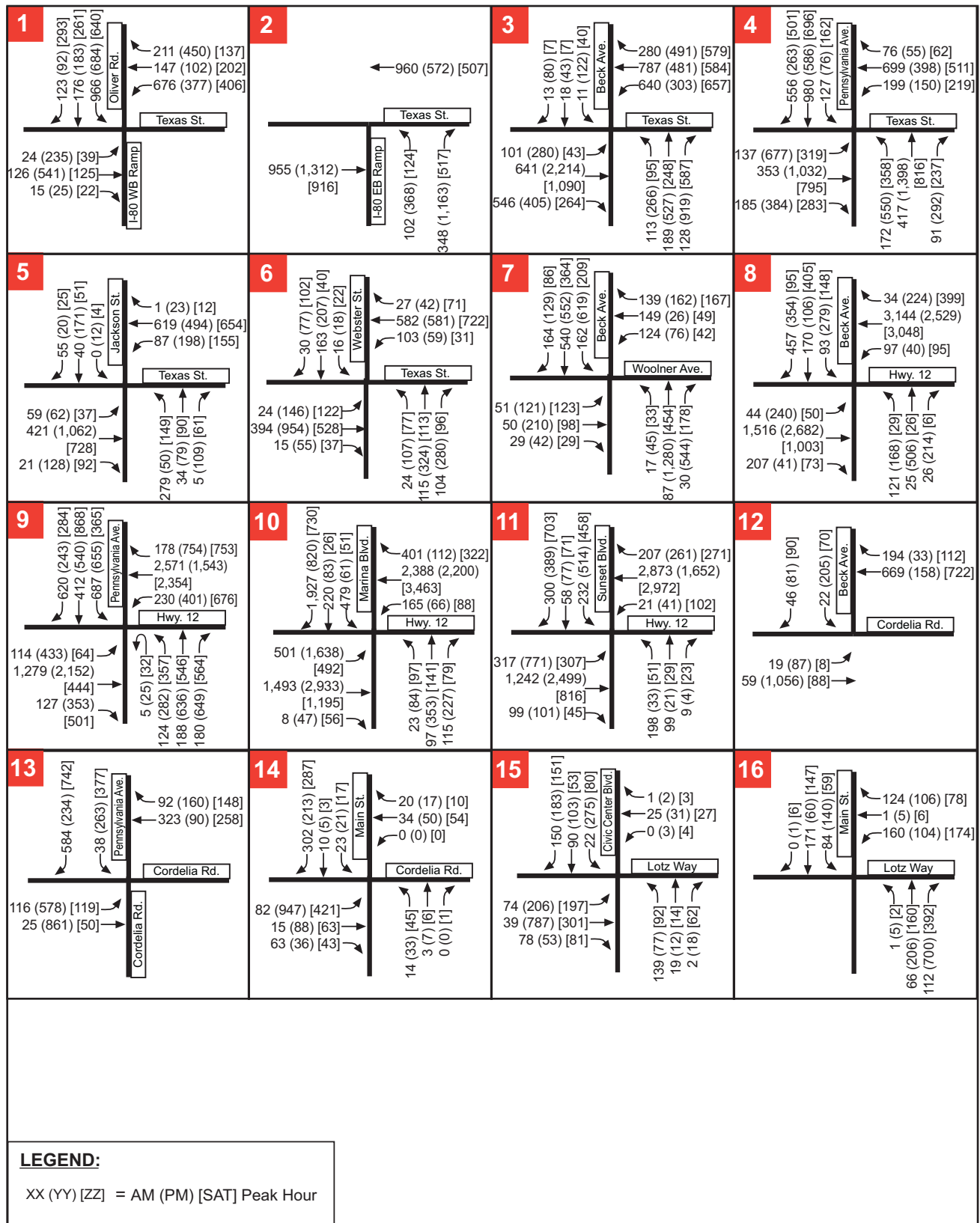
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CUMULATIVE

FIGURE 26B



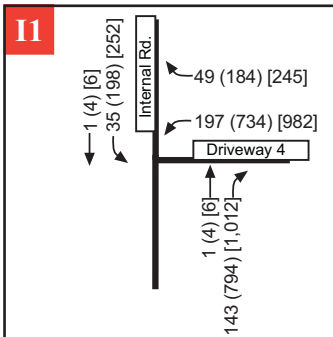
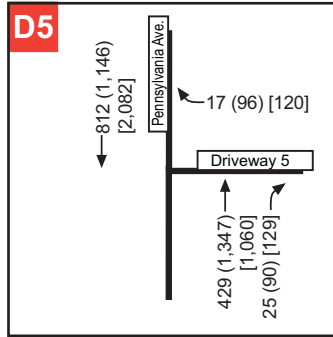
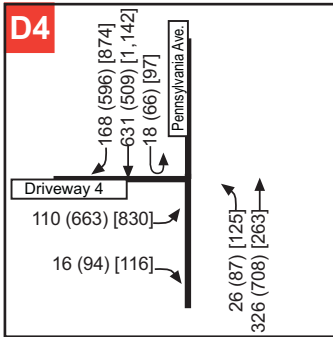
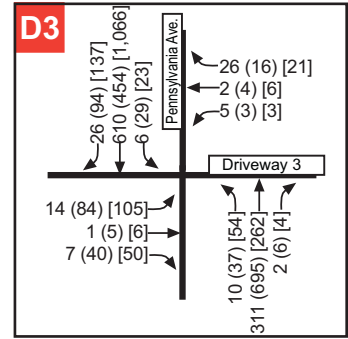
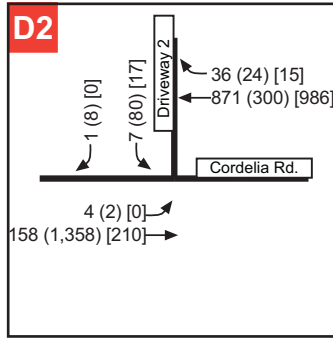
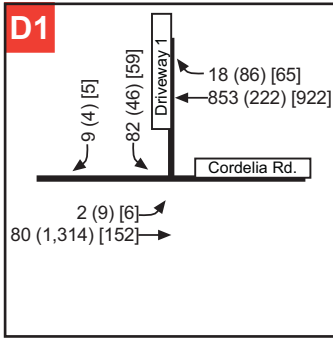
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CUMULATIVE PLUS PROJECT
 BASE PROJECT

FIGURE 27A



LEGEND:

XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour



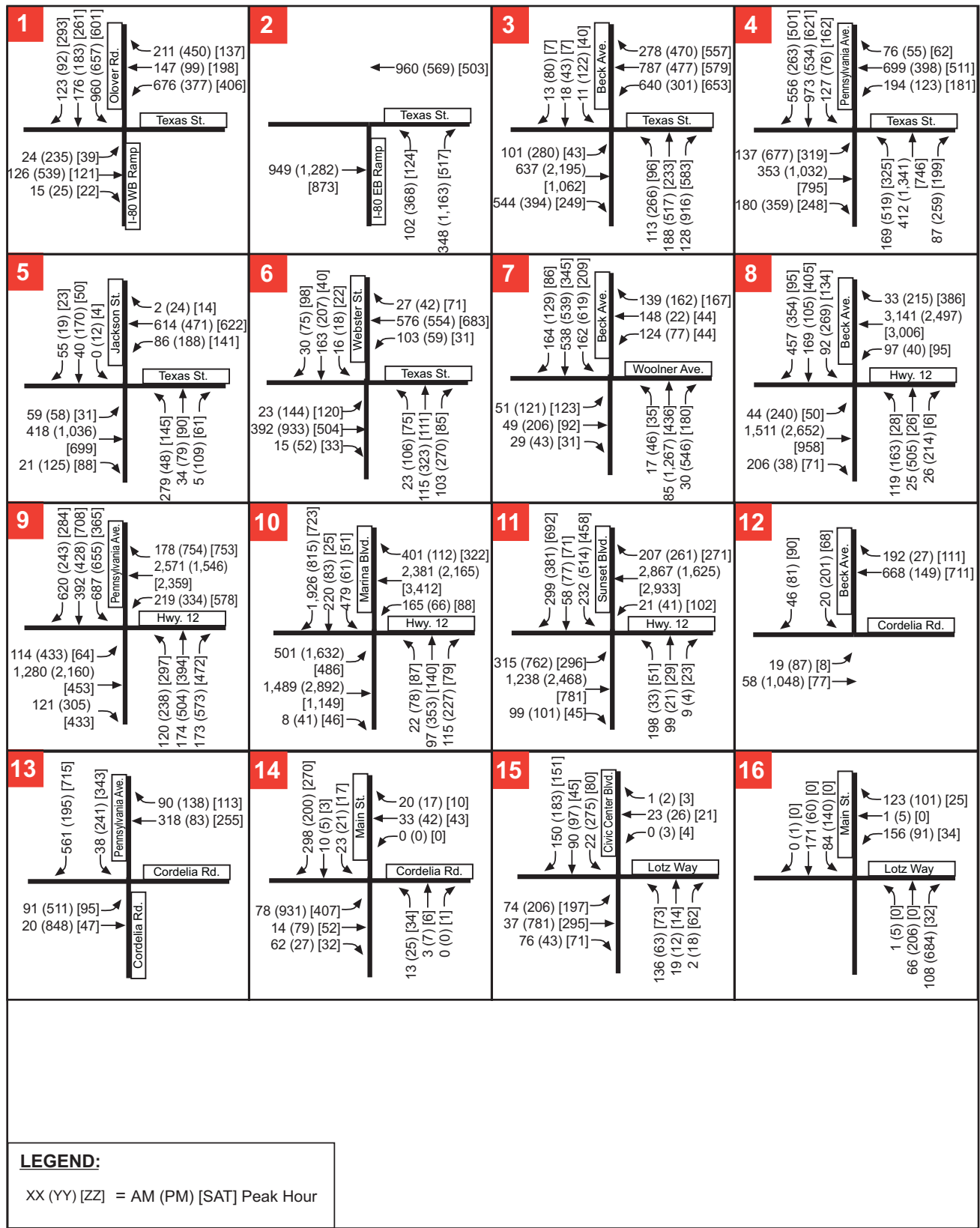
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**PROJECT DRIVEWAY VOLUMES
CUMULATIVE PLUS BASE PROJECT**

FIGURE 27B



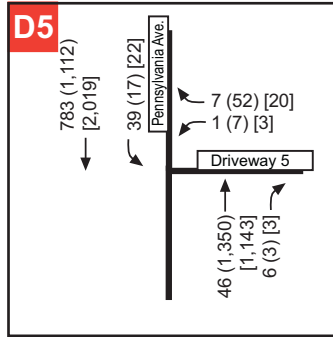
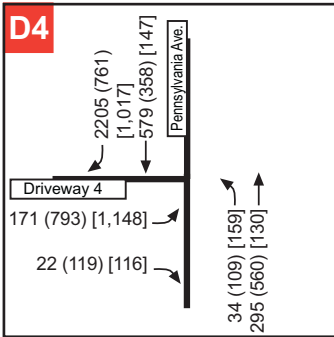
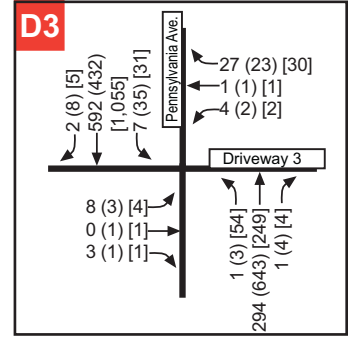
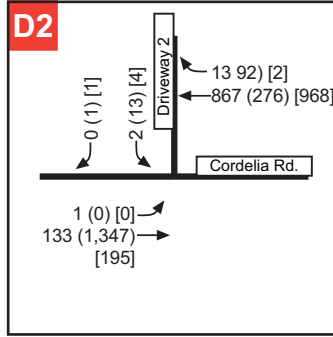
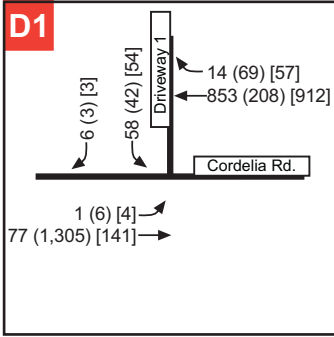
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CUMULATIVE PLUS PROJECT
ALTERNATIVE 1

FIGURE 28A



LEGEND:

XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour



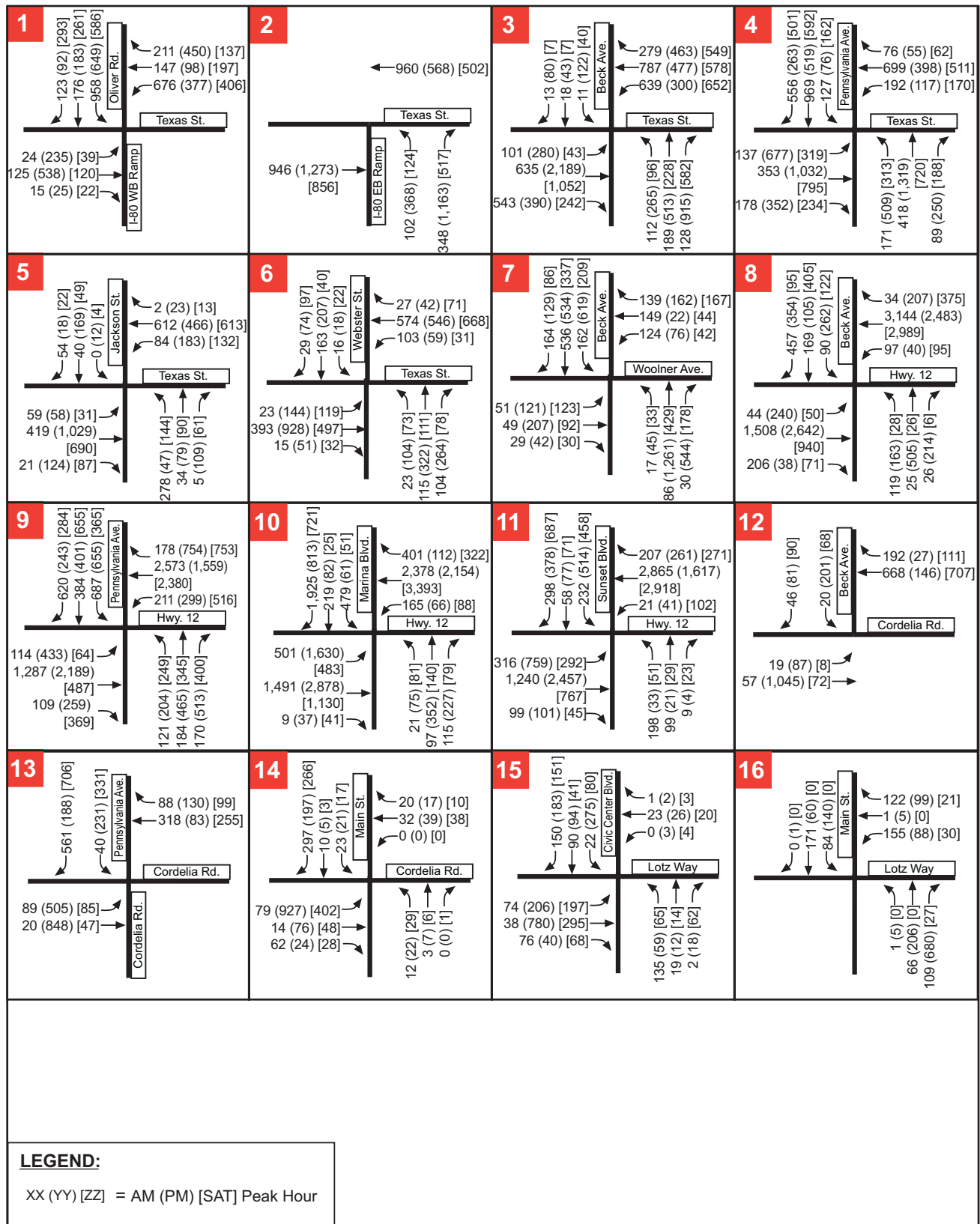
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January 2006
2192-28B

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CUMULATIVE PLUS ALTERNATIVE 1

FIGURE 28B



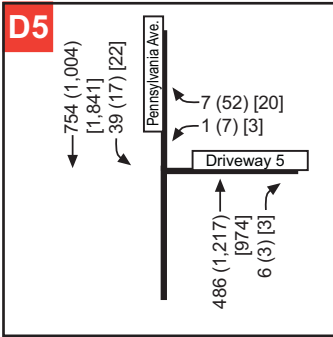
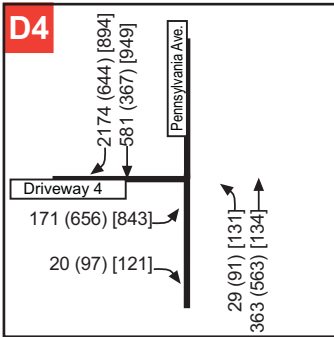
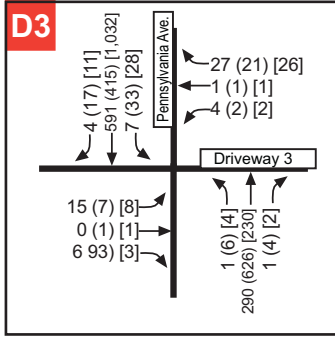
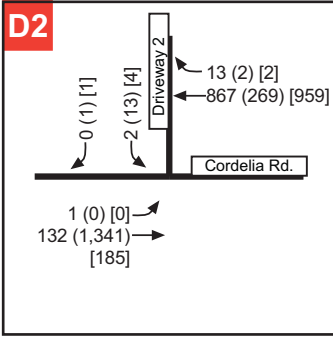
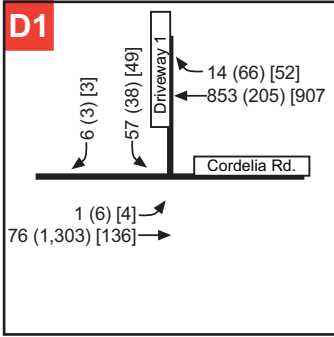
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CUMULATIVE PLUS PROJECT
ALTERNATIVE 2

FIGURE 29A



LEGEND:

XX (YY) [ZZ] = AM (PM) [SAT] Peak Hour



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January 2006
2192-29B

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CUMULATIVE PLUS ALTERNATIVE 2

FIGURE 29B

Table 6- Cumulative LOS Results

Intersection	Jurisdiction	Traffic Control Device	Peak Hour Period	Cumulative (Exist Lane Config.)		Cumulative+ Base Project (Exist Lane Configurations)		Cumulative+ Alt 1 Project (Exist Lane Configurations)		Cumulative+ Alt 2 Project (Exist Lane Configurations)	
				Average Intersection Delay	LOS	Average Intersection Delay	LOS	Average Intersection Delay	LOS	Average Intersection Delay	LOS
1. Texas St/I-80 WB Ramp	Caltrans	Signal	AM	>80	F	>80	F	>80	F	>80	F
			PM	>80	F	>80	F	>80	F	>80	F
			SAT	34	C	59	E	53	D	52	D
2. Texas St/I-80 EB Ramp	Caltrans	Signal	AM	31	C	31	C	31	C	31	C
			PM	58	E	74	E	69	E	68	E
			SAT	23	C	24	C	24	C	24	C
3. Texas St/Beck Ave	Caltrans	Signal	AM	57	E	58	E	58	E	58	E
			PM	>80	F	>80	F	>80	F	>80	F
			SAT	75	E	>80	F	>80	F	>80	F
4. Texas St/Pennsylvania Ave	Fairfield	Signal	AM	>80	F	>80	F	>80	F	>80	F
			PM	>80	F	>80	F	>80	F	>80	F
			SAT	>80	F	>80	F	>80	F	>80	F
5. Texas St/Jackson St	Fairfield	Signal	AM	18	B	18	B	18	B	18	B
			PM	>80	F	>80	F	>80	F	>80	F
			SAT	27	C	65	E	54	D	48	D
6. Texas St/Webster St	Fairfield	Signal	AM	18	B	19	B	18	B	18	B
			PM	67	E	>80	F	>80	F	>80	F
			SAT	40	D	59	E	52	D	50	D
7. Woolner Ave/Beck Ave	Fairfield	Signal	AM	23	C	23	C	23	C	23	C
			PM	>80	F	>80	F	>80	F	>80	F
			SAT	19	B	20	B	20	B	20	B
8. Hwy 12/Beck Ave	Caltrans	Signal	AM	>80	F	>80	F	>80	F	>80	F
			PM	>80	F	>80	F	>80	F	>80	F
			SAT	>80	F	>80	F	>80	F	>80	F
9. Hwy 12/Pennsylvania Ave	Caltrans	Signal	AM	>80	F	>80	F	>80	F	>80	F
			PM	>80	F	>80	F	>80	F	>80	F
			SAT	>80	F	>80	F	>80	F	>80	F
10. Hwy 12/Marina Blvd	Caltrans	Signal	AM	>80	F	>80	F	>80	F	>80	F
			PM	>80	F	>80	F	>80	F	>80	F
			SAT	>80	F	>80	F	>80	F	>80	F
11. Hwy 12/Sunset Ave	Caltrans	Signal	AM	>80	F	>80	F	>80	F	>80	F
			PM	60	E	76	E	71	E	70	E
			SAT	>80	F	>80	F	>80	F	>80	F
12. Cordelia Rd/Beck Ave	Fairfield	TWSC	AM	22	C	23	C	20	C	20	C
			PM	>50	F	>50	F	>50	F	>50	F
			SAT	22	C	26	D	22	C	22	C
13. Cordelia Rd/Pennsylvania Ave	Suisun City	TWSC	AM	>50	F	>50	F	>50	F	>50	F
			PM	>50	F	>50	F	>50	F	>50	F
			SAT	>50	F	>50	F	>50	F	>50	F
14. Cordelia Rd/Main St	Suisun City	All-way	AM	9	A	9	A	9	A	9	A
			PM	>50	F	>50	F	>50	F	>50	F
			SAT	13	B	23	D	18	B	17	C
15. Lotz Way/Civic Center Blvd	Caltrans	All-way	AM	9	A	10	A	9	A	9	A
			PM	>50	F	>50	F	>50	F	>50	F
			SAT	33	D	46	E	42	E	40	E
16. Lotz Way/Main St	Suisun City	Signal	AM	12	B	11	B	11	B	12	B
			PM	11	B	14	B	13	B	13	B
			SAT	11	B	10	A	22	C	23	C
17. Driveway 1/Cordelia Rd	Project	TWSC	AM	N/A	N/A	22	C	20	C	20	C
			PM	N/A	N/A	>50	F	46	E	43	E
			SAT	N/A	N/A	26	D	24	C	23	C
18. Driveway 2/Cordelia Rd.	Project	TWSC	AM	N/A	N/A	19	C	19	C	19	C
			PM	N/A	N/A	>50	F	39	E	38	E
			SAT	N/A	N/A	24	C	21	C	21	C
19. Driveway 3/Pennsylvania Ave	Project	TWSC	AM	N/A	N/A	20	C	18	C	19	C
			PM	N/A	N/A	>50	F	24	C	23	C
			SAT	N/A	N/A	>50	F	34	D	32	D
20. Driveway 4/Pennsylvania Ave	Project	Signal	AM	N/A	N/A	48	E	50	E	41	E
			PM	N/A	N/A	>50	F	>50	F	>50	F
			SAT	N/A	N/A	>50	F	>50	F	>50	F
21. Driveway 5/Pennsylvania Ave	Project	TWSC	AM	N/A	N/A	16	C	13	B	13	B
			PM	N/A	N/A	>50	F	>50	F	43	E
			SAT	N/A	N/A	>50	F	>50	F	>50	F
23. Driveway 4/Internal Project Road	Project	Signal	AM	N/A	N/A	9	A	9	A	8	A
			PM	N/A	N/A	>50	F	>50	F	26	D
			SAT	N/A	N/A	>50	F	>50	F	>50	F

INTERSECTION OPERATIONS

The intersection results for all three project scenarios are shown on Table 6 for all scenarios. The following intersections would be impacted under the Base Project, Alternative 1, and Alternative 2. The LOS results for the Cumulative Scenario (all alternatives) are provided in Appendix E.

For purposes of this analysis, the existing lane configurations are assumed to be in place at many of the impacted locations since we cannot guarantee that the required mitigations measures are in place. Our discussion of impacts and mitigations does note the potential benefits associated with any Existing Plus Project mitigation measures.

BASE PROJECT IMPACTS AND MITIGATIONS

Texas Street/I-80 WB Ramp

Prior to the introduction of project trips, this intersection operates at LOS F during the AM and PM peak hour (greater than 80 seconds of delay). During the Saturday peak hour, the intersection operates at LOS C with 34 seconds of delay. After the addition of project traffic, this intersection operates at LOS F with increased delay during both the AM and PM peak hours and LOS E during the Saturday peak hour. Since the addition of project traffic increases traffic volumes by 5 percent during the PM peak hour and causes the LOS to degrade from LOS C to LOS E during the Saturday peak hour, a significant impact occurs.

Impact A-11: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour. A significant impact also occurs during the Saturday peak hour since the project is responsible for a degradation of the LOS from LOS C to LOS E.

Mitigation A-11: The mitigation measures identified under Existing Plus Project Scenario recommended the addition of an exclusive southbound left-turn lane. With this mitigation, the intersection would operate at LOS E in the AM peak hour and LOS D in the PM peak hour, which indicates degraded operations compared to existing conditions.

Mitigating this impact will require the addition of a second exclusive southbound left-turn lane in addition to the mitigation under Existing Plus Project Scenario. The project would fund the installation, which would require the approval of the California Department of Transportation. There appears to be sufficient right-of-way for the construction of this improvement. After implementation of this mitigation measure, the LOS at this intersection LOS would be C or better during all peak hours.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

Texas Street/I-80 EB Ramp

This intersection operates at LOS E in the PM peak hour prior to the introduction of project trips with a delay of 58 seconds. During the AM peak hour, the intersection operates at LOS C with a delay of 31 seconds. The intersection operates at LOS C with a delay of 23 seconds in the Saturday peak hour. After the addition of project trips, the intersection continues operate at LOS E during the PM period with a delay of 74 seconds. Since

the addition of project traffic increases traffic volumes by 4 percent during the PM peak hour, a significant impact occurs.

Impact A-12: The addition of project traffic causes an increase of more than three percent at intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour.

Mitigation A-12: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require a traffic signal retiming. The project would be responsible for the implementation of this mitigation measure, which would require the approval of the California Department of Transportation. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all peak hours.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

Texas Street/Beck Avenue

This intersection operates at LOS E during the AM peak hour, LOS F during the PM peak hour, and LOS E during the Saturday peak hour. This LOS currently exceeds the LOS C threshold that is generally applicable to Caltrans facilities. After the addition of project trips, the LOS during the AM and PM peak hour remains E and F and the Saturday LOS degrades from E to F. Since the addition of project traffic increases traffic volumes by 4 and 8 percent during the PM and Saturday peak hour, respectively, a significant impact occurs.

Impact A-13: The addition of project traffic causes an increase of more than three percent at intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-13: The mitigation measures identified under Existing Plus Project Scenario recommended the modification of the westbound right-turn movement from permitted to free movement and optimization of the signal timings at this intersection. With this mitigation, the intersection would still operate at LOS F during both the PM and Saturday peak hour, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the following improvements in addition to the mitigation under Existing Plus Project Scenario – constructing two additional eastbound through lanes; constructing one additional through lane and left-turn lane on the westbound approach; and providing a free right-turn lane and restriping the shared through/right-turn lane to through lane on the northbound approach. Based on a review of the existing intersection configuration, there appears to be insufficient right-of-way to construct these improvements without severely impacting the adjacent buildings and parking lots. No feasible mitigation exists for this deficient condition. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

Texas Street/Pennsylvania Avenue

This intersection operates at LOS F during the AM, PM, and Saturday peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection continues to operate at LOS F with increased delay during all peak hours. Since the addition of project traffic increases traffic volumes by 6, 16 and 26 percent during the AM, PM, and Saturday peak hour, respectively, a significant impact occurs.

Impact A-14: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during all peak hours.

Mitigation A-14: The mitigation measures identified under Existing Plus Project Scenario recommended the addition of an exclusive right-turn lane and restriping the existing shared through/right-turn lane to exclusive through lane on the southbound approach. With this mitigation, the intersection would still operate at LOS F during both the PM and Saturday peak hours, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the following improvements in addition to the mitigation under Existing Plus Project Scenario – constructing one additional left-turn and through lane on the eastbound and northbound approaches. A review of this intersection indicates that there is insufficient right-of-way for this improvement since there are existing buildings and parking lots on all sides of the building. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

Texas Street/Jackson Street

This intersection operates at LOS F prior to the introduction of project trips during the PM peak hour. The intersection operates at LOS C or better during the other peak hours. The addition of project traffic causes the LOS during the Saturday peak hour to degrade from LOS C to LOS E. Since the addition of project traffic increases traffic volumes by 11 percent during the PM peak hour and causes the LOS to degrade from LOS C to LOS E during the Saturday peak hour, a significant impact occurs.

Impact A-15: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour. A significant impact also occurs during the Saturday peak hour since the project is responsible for a degradation of the LOS from LOS C to LOS E.

Mitigation A-15: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require a major reconstruction of this intersection to add one eastbound through lane along Texas Street. Based on a review of the existing intersection configuration, there appears to be insufficient right-of-way to construct these improvements without severely impacting the

adjacent buildings and parking lots. No feasible mitigation exists for this deficient condition. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

Texas Street/Webster Street

This intersection operates at LOS E prior to the introduction of project trips during the PM peak hour. During the other peak hours, this intersection operates at LOS D or better which is considered acceptable for the City of Fairfield. After the introduction of project trips, this intersection operates at LOS F during the PM peak hour and LOS E during the Saturday peak hour. Since the addition of project traffic increases traffic volumes by 10 percent during the PM peak hour and causes the LOS to degrade from LOS D to LOS E during the Saturday peak hour, a significant impact occurs.

Impact A-16: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour. A significant impact also occurs during the Saturday peak hour since the project is responsible for a degradation of the LOS from LOS D to LOS E.

Mitigation A-16: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require a major reconstruction of this intersection to add one eastbound through lane along Texas Street. Based on a review of the existing intersection configuration, there appears to be insufficient right-of-way to construct these improvements without severely impacting the adjacent buildings and parking lots. No feasible mitigation exists for this deficient condition. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

Woolner Avenue/Beck Avenue

This intersection operates at LOS F prior to the introduction of project trips during the PM peak hour. During the other peak hours, this intersection operates at LOS C or better which is considered acceptable for the City of Fairfield. After the introduction of project trips, this intersection operates at LOS F during the PM peak hour. A significant impact occurs because the project increases the traffic volume by 4 percent at an intersection that operates at a deficient LOS prior to the introduction of project traffic.

Impact A-17: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hours.

Mitigation A-17: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require the addition of a second left-turn lane on the southbound approach and an exclusive right-turn lane on the northbound approach. Based on a review of the existing intersection configuration, there appears to be insufficient right-of-way to construct these improvements without severely impacting the adjacent buildings and parking lots. No feasible mitigation exists for this deficient condition. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

SR 12/Beck Avenue

This intersection operates at LOS F during the AM, PM, and Saturday peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection continues to operate at LOS F with increased delay during all peak hours. Since the addition of project traffic increases traffic volumes by 6 and 10 percent during the PM and Saturday peak hour, respectively, a significant impact occurs.

Impact A-18: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-18: The mitigation measures identified under Existing Plus Project Scenario recommended the addition of an exclusive right-turn lane and restriping the existing shared through/right-turn lane to exclusive through lane on the westbound approach and the addition of the second left-turn lane on the southbound approach. With this mitigation, the intersection would still operate at LOS F during all the peak hours, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the following improvements in addition to the mitigation under Existing Plus Project Scenario – constructing two additional through travel lanes along SR 12; providing an exclusive right-turn lane on the northbound approach; and providing an exclusive free right-turn lane on the southbound approach. A review of this intersection indicates that there is insufficient right-of-way for this improvement. Additionally, improvements of this magnitude would require a complete reconstruction of the intersection, which is beyond the capability of the project to perform. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

SR 12/Pennsylvania Avenue

This intersection operates at LOS F during the AM, PM, and Saturday peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection continues to operate at LOS F with increased delay during all peak hours. Since the addition of project traffic increases traffic volumes by 8, 25 and 40 percent during the AM, PM, and Saturday peak hour, respectively, a significant impact occurs.

Impact A-19: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during all peak hours.

Mitigation A-19: Mitigating these impacts would likely require grade separation of one or more movements. An urban interchange would fully mitigate the deficient conditions at this intersection.

Implementing this mitigation measure would require extensive engineering studies and coordination between the project applicant, the City of Fairfield, Suisun City, and the California Department of Transportation. Constructing an interchange at this location could cost upwards of \$10 million, as documented by the SR 12 MIS completed in 2001. Given the difficulties in implementing this mitigation measure and the cost involved, full implementation cannot be assured in a timely fashion to mitigate the project impact.

Additionally, there is currently insufficient funding for this improvement and no regional mechanisms to collect money for this improvement. For example, Solano County does not have a countywide traffic impact fee program that would fund a regional improvement such as this. The City of Fairfield is a potential funding source for this interchange, although it is uncertain at this time whether there is sufficient funding from other parties to construct the interchange in conjunction with this project.

One other consideration is that the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

SR 12/Marina Blvd

This intersection operates at LOS F during the AM, PM, and Saturday peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection continues to operate at LOS F with increased delay during all time periods. Since the addition of project traffic increases traffic volumes by 5 and 8 percent during the PM and Saturday peak hour, respectively, a significant impact occurs.

Impact A-20: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-20: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require the addition of lanes on nearly all approaches to the intersection. The required improvements would include additional two through travel lanes along SR 12 and addition left

and right-turn lanes on nearly all approaches. Alternately, one or more of the movements could require grade separation. A review of this intersection indicates that there is insufficient right-of-way for this improvement. Since the full mitigation required to address this impact cannot be implemented, the impact remains significant and unavoidable.

One other consideration is that the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

SR 12/Sunset Avenue

This intersection operates at LOS F during the AM and Saturday peak hours under the Cumulative No Project scenario. The intersection operates at LOS E during the PM peak hour also under the Cumulative No Project scenario. LOS C would be the applicable threshold for this location since the intersection is under the jurisdiction of Caltrans. With the addition of project traffic, the intersection continues to operate at a deficient LOS with increased delay during all time periods. Since the addition of project traffic increases traffic volumes by 5 and 6 percent during the PM and Saturday peak hour, respectively, a significant impact occurs.

Impact A-21: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-21: The mitigation measures identified under Existing Plus Project Scenario recommended a traffic signal optimization. With this mitigation, the intersection would still operate at a deficient LOS during all the peak hours, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the following improvements in addition to the mitigation under Existing Plus Project Scenario – providing two additional through travel lanes along SR 12; constructing an exclusive left-turn lane on the northbound approach; providing an exclusive left-turn lane and a free right-turn lane on the southbound approach. A review of this intersection indicates that there is insufficient right-of-way for this improvement. Additionally, improvements of this magnitude would require a complete reconstruction of the intersection, which is beyond the capability of the project to perform. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

One other consideration is that the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

Cordelia Road/Beck Avenue

This intersection, which operates under stop-sign control, is projected to operate at LOS F during the Cumulative No Project scenario in the PM peak hour. With the addition of project traffic, the intersection would operate at LOS F with increased delays during the PM peak hour. A significant impact occurs since the project adds more

than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips during the PM peak hour.

Impact A-22: The he project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips during the PM peak hour.

Mitigation A-22: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require the installation of a traffic signal at this location. The project would be responsible for the construction of this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS D or better during all time periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Less than significant

Cordelia Road/Pennsylvania Avenue

This intersection, which operates currently under stop-sign control, is projected to operate at LOS F during all the peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection would operate at LOS F with increased delays during all the peak hours. A significant impact would occur if the project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips. Since the addition of project traffic increases traffic volumes by more than 10 trips during all the peak hours, a significant impact occurs. Additionally, if Mitigation Measure A-7 is implemented, then LOS F conditions occur during the PM period and a significant impact still occurs.

Impact A-23: The he project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips during all the peak hours. If the proposed mitigation measure is implemented, this intersection would still operate at LOS F during the PM period.

Mitigation A-23: The mitigation measures identified under Existing Plus Project Scenario recommended the installation of a traffic signal. With this mitigation, the intersection would still operate at a LOS F during the PM peak hour, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the addition of an exclusive northbound left-turn lane in addition to the mitigation under Existing Plus Project Scenario. The project would be responsible for the construction of this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all time periods. Since this intersection is under the jurisdiction of the City of Suisun City, additional improvements at this location do not require the approval of the City of Fairfield or Caltrans.

Impact after Mitigation: Less than significant

Cordelia Road/Main Street

This intersection, which operates under stop-sign control, is projected to operate at LOS F during the Cumulative No Project scenario in the PM peak hour. With the addition of project traffic, the intersection would operate at LOS F with increased delays during the PM peak hour and LOS D during the Saturday peak hour. Since the

addition of project traffic increases traffic volumes by more than 10 trips during the PM peak hour and causes the LOS to degrade from LOS B to LOS D during the Saturday peak hour, a significant impact occurs.

Impact A-24: The addition of project traffic causes an increase of more than 10 percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour. A significant impact also occurs during the Saturday peak hour since the project is responsible for a degradation of the LOS from LOS B to LOS D.

Mitigation A-24: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require the installation of a traffic signal and the additional of an exclusive eastbound left-turn lane. The project would be responsible for the construction of this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all time periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans.

Impact after Mitigation: Less than significant

Lotz Way/Civic Center Boulevard

This intersection, which operates under stop-sign control, is projected to operate at LOS F during the Cumulative No Project scenario in the PM peak hour. This intersection also operates at LOS D during the Saturday Peak Hour. With the addition of project traffic, the intersection would operate at LOS F with increased delays during the PM peak hour and LOS E during the Saturday peak hour. Since the addition of project traffic increases traffic volumes by more than 10 trips during the PM and Saturday peak hours, a significant impact occurs.

Impact A-25: The he project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-25: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require the installation of a traffic signal and the additional of an exclusive eastbound left-turn lane. The project would be responsible for the construction of this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all time periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

Cordelia Road/Driveway #1

This proposed intersection would be located to the south of Cordelia Road along Pennsylvania Avenue and would provide access to residential area south of the railroad tracks. For purposes of this analysis, this intersection is assumed to operate under side-street stop sign control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS F during the PM peak hour and LOS D during the Saturday

peak hour. A significant impact occurs because this intersection would operate unacceptably at LOS F (PM peak hour) and LOS D (Saturday peak hour) after the addition of project traffic.

Impact A-26: The intersection of Cordelia Road/Driveway #1 would operate at LOS F during the PM peak hour and LOS D during the Saturday peak hour. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-26: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require changes in the traffic control at this location. A traffic signal would be required at this location and an exclusive right-turn lane would be required on Cordelia Road. Prior to installation of a traffic signal, a complete signal warrant analysis should be conducted to verify the need for a traffic signal. After implementation of this mitigation measure, the intersection LOS would be LOS C during all periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant

Cordelia Road/Driveway #2

This proposed intersection would be located to the south of Cordelia Road along Pennsylvania Avenue and would provide access to residential area south of the railroad tracks as well as the Ardave parcel. For purposes of this analysis, this intersection is assumed to operate under side-street stop sign control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is initially assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS F during the PM peak hour. A significant impact occurs because this intersection would operate unacceptably at LOS F during the PM peak hour after the addition of project traffic.

Impact A-27: The intersection of Cordelia Road/Driveway #2 would operate at LOS F during the PM peak hour. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-27: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require the installation of a traffic signal at this location. However, a traffic signal at this location cannot be recommended given the distance to Driveway #1 and the Pennsylvania Avenue/Cordelia Road intersection. Therefore, turn restrictions at this intersection, such as restricting left-out movements, would be recommended. The project applicant would be responsible for the implementation of this mitigation measure. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

Pennsylvania Avenue/Driveway #3

This proposed intersection would be located to the south of SR 12 along Pennsylvania Avenue and would provide access to Planning Areas 1 (secondary access) and 3 (primary access). For purposes of this analysis, this intersection is assumed to operate under side-street stop sign control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is initially assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS F during both the PM and Saturday peak hours. A significant impact occurs because this intersection would operate unacceptably at LOS F during both the PM and Saturday peak hours after the addition of project traffic.

Impact A-28: The intersection of Pennsylvania Avenue/Driveway #3 would operate at LOS F during the PM and Saturday peak hours after the addition of project traffic. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-28: No mitigation measures were identified under Existing Plus Project Scenario at this location.

This driveway will have to operate as right-in/right-out driveways only. We considered installing a traffic signal but cannot recommend a traffic signal given the distance to the signals at the main project entrance and Pennsylvania Avenue/Cordelia Road. With these modifications, the intersection would operate at LOS C or better during all periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

Pennsylvania Avenue/Driveway #4

This intersection would provide primary access to the main commercial portion of the proposed development. For purposes of this analysis, this intersection is assumed to operate under side-street stop control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS E during the AM peak hour and LOS F during both the PM and Saturday peak hours. Since this LOS would exceed the City's LOS standard of C, a significant impact occurs. If the Existing Plus Approved mitigation measures are implemented, including the installation of a traffic signal, deficient conditions still occur in the Saturday peak hour (LOS E).

Impact A-29: The intersection of Pennsylvania Avenue/Driveway #4 would operate at LOS E in the AM peak hour and LOS F in the PM and Saturday peak hours after the addition of project traffic during all the peak hours. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-29: The mitigation measures identified under Existing Plus Project Scenario recommended the installation of a traffic signal. With this mitigation, the intersection would still operate unacceptably at a LOS E during the Saturday peak hour.

Mitigating this impact would require the additional turn lanes at this intersection, in addition to the traffic signal. With these modifications, the intersection would operate at LOS C or better during all time periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

Pennsylvania Avenue/Driveway #5

This proposed intersection would be located to the south of SR 12 along Pennsylvania Avenue and would provide access to the Gilbert Parcel. For purposes of this analysis, this intersection is assumed to operate under side-street stop control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS F during both the PM and Saturday Peak hours. A significant impact occurs because this intersection would operate unacceptably at LOS F after the addition of project traffic.

Impact A-30: The intersection of Pennsylvania Avenue/Driveway #5 would operate at LOS F after the addition of project traffic during the PM and Saturday peak hours. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-30: The mitigation measures identified under Existing Plus Project Scenario recommended the modification of access control to right-in/right-out only at this location. With this mitigation, the intersection would operate at LOS B or better during all time periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

Driveway #4/Internal Roadway

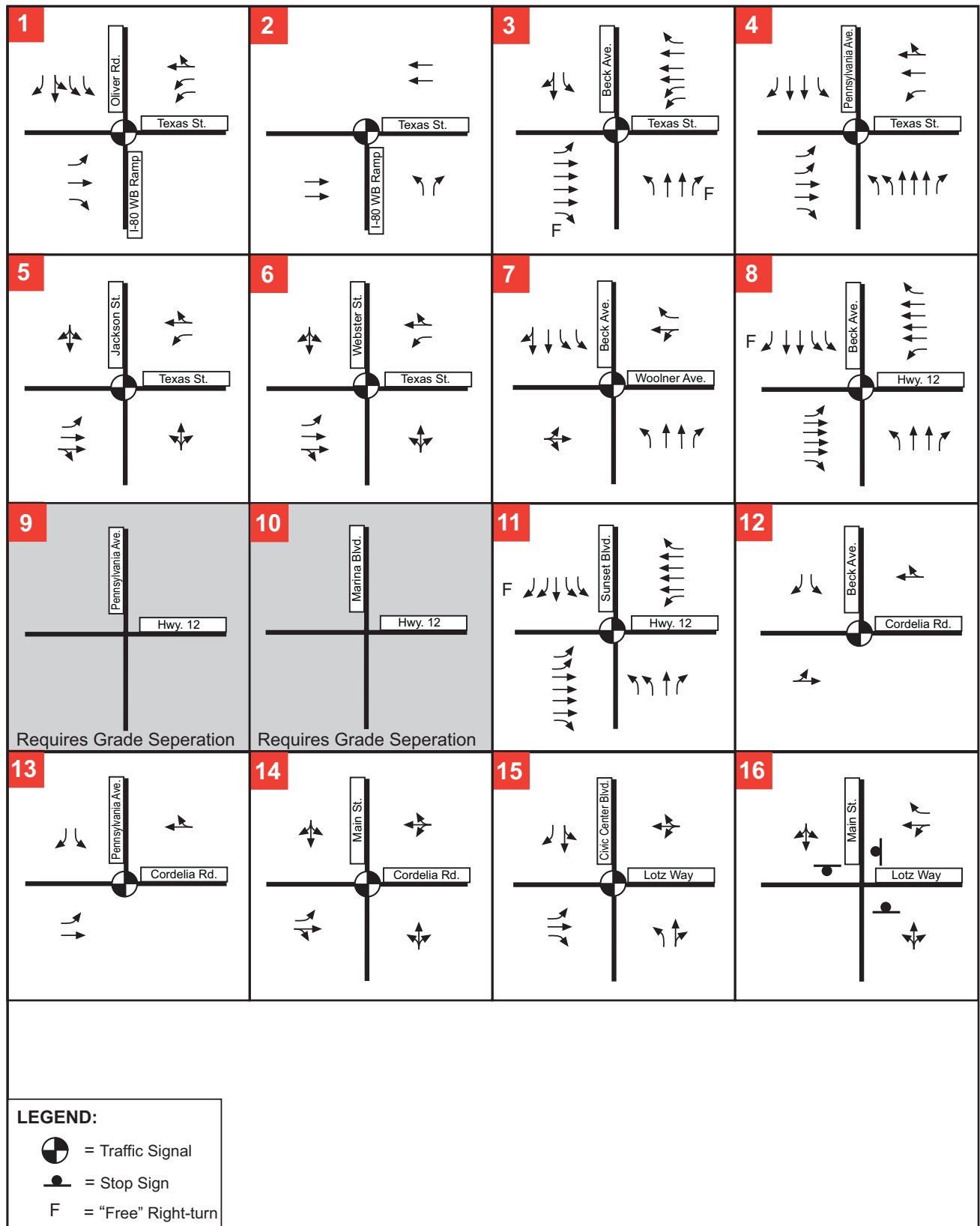
This intersection represents the connection between the major internal roadway on the main commercial site and Driveway #4. Nearly all of the traffic accessing the main commercial site will enter through this intersection while traveling to individual buildings. This analysis assumes that this intersection operates as an all-way stop intersection with one lane approaches in all directions. Based on this assumed configuration, the intersection will operate at LOS F during the PM and Saturday peak hours. This LOS exceeds the City of Suisun City's LOS C standard and a significant impact therefore occurs.

Impact A-31: The intersection of Driveway #4/Internal roadway would operate at LOS F after the addition of project traffic during the PM and Saturday peak hours. A significant impact occurs because this intersection would exceed the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-31: The mitigation measures identified under Existing Plus Project Scenario recommended the addition of a traffic signal at this location. With this improvement, the intersection would operate at LOS B or better during all time periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

The improvements required to mitigate the project impacts under the Base Project Alternative are shown on Figure 30A (off-site intersection) and Figure 30B (on-site intersections).



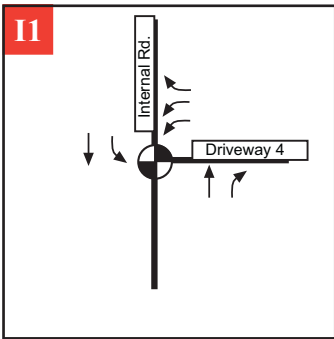
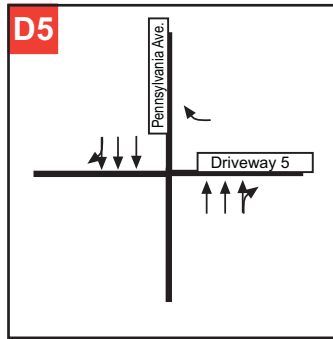
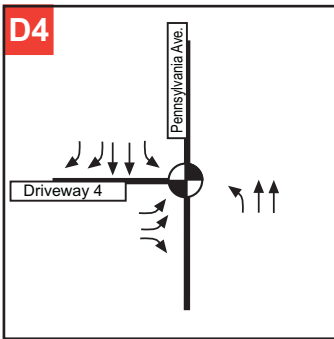
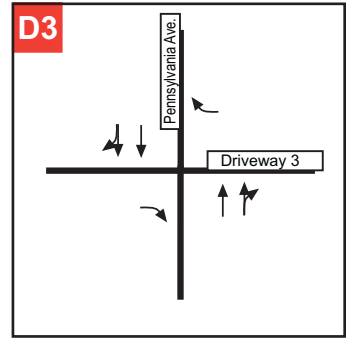
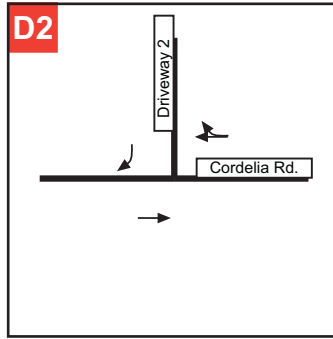
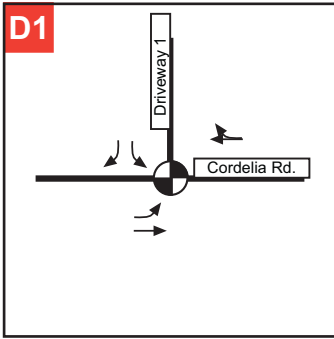
FEHR & PEERS
TRANSPORTATION CONSULTANTS

January 2006
2192-30A

Gentry-Suisun Annexation

**CUMULATIVE PLUS BASE PROJECT
WITH CUMULATIVE MITIGATION**

FIGURE 30A



LEGEND:



FEHR & PEERS
TRANSPORTATION CONSULTANTS

February 2006
2192-30B

Gentry-Suisun Annexation

**BASE PROJECT DRIVEWAY CONFIGURATIONS
(CUMULATIVE)**

FIGURE 30B

ALTERNATIVE 1 IMPACTS AND MITIGATIONS

Texas Street/I-80 WB Ramp

Prior to the introduction of project trips, this intersection operates at LOS F during the AM and PM peak hour (greater than 80 seconds of delay). During the Saturday peak hour, the intersection operates at LOS C with 34 seconds of delay. After the addition of project traffic, this intersection operates at LOS F with increased delay during both the AM and PM peak hours and LOS D during the Saturday peak hour. Since the addition of project traffic increases traffic volumes by 4 percent during the PM peak hour and causes the LOS to degrade from LOS C to LOS D during the Saturday peak hour, a significant impact occurs.

Impact A-11: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour. A significant impact also occurs during the Saturday peak hour since the project is responsible for a degradation of the LOS from LOS C to LOS D.

Mitigation A-11: The mitigation measures identified under Existing Plus Project Scenario recommended the addition of an exclusive southbound left-turn lane. With this mitigation, the intersection would operate at LOS E in the AM and PM peak hours, which indicates degraded operations compared to existing conditions.

Mitigating this impact will require the addition of a second exclusive southbound left-turn lane in addition to the mitigation under Existing Plus Project Scenario. The project would fund the installation, which would require the approval of the California Department of Transportation. There appears to be sufficient right-of-way for the construction of this improvement. After implementation of this mitigation measure, the LOS at this intersection LOS would be C or better during all peak hours.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

Texas Street/I-80 EB Ramp

This intersection operates at LOS E in the PM peak hour prior to the introduction of project trips with a delay of 58 seconds. During the AM peak hour, the intersection operates at LOS C with a delay of 31 seconds. The intersection operates at LOS C with a delay of 23 seconds in the Saturday peak hour. After the addition of project trips, the intersection continues operate at LOS E during the PM period with a delay of 69 seconds. Since the addition of project traffic increases traffic volumes by approximately 3 percent during the PM peak hour, a significant impact occurs.

Impact A-12: The addition of project traffic causes an increase of more than three percent at intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour.

Mitigation A-12: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require a traffic signal retiming. The project would be responsible for the implementation of this mitigation measure, which would require the approval of the California Department

of Transportation. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all peak hours.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

Texas Street/Beck Avenue

This intersection operates at LOS E during the AM peak hour, LOS F during the PM peak hour, and LOS E during the Saturday peak hour. This LOS currently exceeds the LOS C threshold that is generally applicable to Caltrans facilities. After the addition of project trips, the LOS during the AM and PM peak hour remains E and F and the Saturday LOS degrades from E to F. Since the addition of project traffic increases traffic volumes by 3 and 6 percent during the PM and Saturday peak hour, respectively, a significant impact occurs.

Impact A-13: The addition of project traffic causes an increase of more than three percent at intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-13: The mitigation measures identified under Existing Plus Project Scenario recommended the modification of the westbound right-turn movement from permitted to free movement and optimization of the signal timings at this intersection. With this mitigation, the intersection would still operate at LOS F during the PM peak hour and LOS E during the Saturday peak hour, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the following improvements in addition to the mitigation under Existing Plus Project Scenario – constructing two additional eastbound through lanes; constructing one additional through lane and left-turn lane on the westbound approach; and providing a free right-turn lane and restriping the shared through/right-turn lane to through lane on the northbound approach. Based on a review of the existing intersection configuration, there appears to be insufficient right-of-way to construct these improvements without severely impacting the adjacent buildings and parking lots. No feasible mitigation exists for this deficient condition. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Caltrans. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

Texas Street/Pennsylvania Avenue

This intersection operates at LOS F during the AM, PM, and Saturday peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection continues to operate at LOS F with increased delay during all peak hours. Since the addition of project traffic increases traffic volumes by 5, 12 and 18 percent during the AM, PM, and Saturday peak hour, respectively, a significant impact occurs.

Impact A-14: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during all peak hours.

Mitigation A-14: The mitigation measures identified under Existing Plus Project Scenario recommended the addition of an exclusive right-turn lane and restriping the existing shared through/right-turn lane to exclusive through lane on the southbound approach. With this mitigation, the intersection would still operate at LOS F during both the PM and Saturday peak hours, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the following improvements in addition to the mitigation under Existing Plus Project Scenario – constructing one additional left-turn and through lane on the eastbound approach and providing one additional left-turn lane on the northbound approach. A review of this intersection indicates that there is insufficient right-of-way for this improvement since there are existing buildings and parking lots on all sides of the building. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

Texas Street/Jackson Street

This intersection operates at LOS F prior to the introduction of project trips during the PM peak hour. The intersection operates at LOS C or better during the other peak hours. With the addition of project traffic, this intersection would operate at LOS F with increased delays during the PM peak hour. Since the addition of project traffic increases traffic volumes by 8 percent during the PM peak hour, a significant impact occurs.

Impact A-15: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour.

Mitigation A-15: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require a major reconstruction of this intersection to add one eastbound through lane along Texas Street. Based on a review of the existing intersection configuration, there appears to be insufficient right-of-way to construct these improvements without severely impacting the adjacent buildings and parking lots. No feasible mitigation exists for this deficient condition. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

Texas Street/Webster Street

This intersection operates at LOS E prior to the introduction of project trips during the PM peak hour. During the other peak hours, this intersection operates at LOS D or better which is considered acceptable for the City of Fairfield. After the introduction of project trips, this intersection operates at LOS F during the PM peak hour. Since the addition of project traffic increases traffic volumes by 7 percent during the PM peak hour, a significant impact occurs.

Impact A-16: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour.

Mitigation A-16: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require a major reconstruction of this intersection to add one eastbound through lane along Texas Street. Based on a review of the existing intersection configuration, there appears to be insufficient right-of-way to construct these improvements without severely impacting the adjacent buildings and parking lots. No feasible mitigation exists for this deficient condition. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

Woolner Avenue/Beck Avenue

This intersection operates at LOS F prior to the introduction of project trips during the PM peak hour. During the other peak hours, this intersection operates at LOS C or better which is considered acceptable for the City of Fairfield. After the introduction of project trips, this intersection operates at LOS F during the PM peak hour. A significant impact occurs because the project increases the traffic volume by 3 percent at an intersection that operates at a deficient LOS prior to the introduction of project traffic.

Impact A-17: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hours.

Mitigation A-17: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require the addition of a second left-turn lane on the southbound approach and an exclusive right-turn lane on the northbound approach. Based on a review of the existing intersection configuration, there appears to be insufficient right-of-way to construct these improvements without severely impacting the adjacent buildings and parking lots. No feasible mitigation exists for this deficient condition. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would

require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

SR 12/Beck Avenue

This intersection operates at LOS F during the AM, PM, and Saturday peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection continues to operate at LOS F with increased delay during all peak hours. Since the addition of project traffic increases traffic volumes by 4 and 8 percent during the PM and Saturday peak hour, respectively, a significant impact occurs.

Impact A-18: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours. .

Mitigation A-18: The mitigation measures identified under Existing Plus Project Scenario recommended the addition of an exclusive right-turn lane and restriping the existing shared through/right-turn lane to exclusive through lane on the westbound approach and the addition of the second left-turn lane on the southbound approach. With this mitigation, the intersection would still operate at LOS F during all the peak hours, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the following improvements in addition to the mitigation under Existing Plus Project Scenario – constructing two additional through travel lanes along SR 12; providing an exclusive right-turn lane on the northbound approach; and providing an exclusive free right-turn lane on the southbound approach. A review of this intersection indicates that there is insufficient right-of-way for this improvement. Additionally, improvements of this magnitude would require a complete reconstruction of the intersection, which is beyond the capability of the project to perform. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Caltrans). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

SR 12/Pennsylvania Avenue

This intersection operates at LOS F during the AM, PM, and Saturday peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection continues to operate at LOS F with increased delay during all peak hours. Since the addition of project traffic increases traffic volumes by 7, 19 and 29 percent during the AM, PM, and Saturday peak hour, respectively, a significant impact occurs.

Impact A-19: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during all peak hours.

Mitigation A-19: Mitigating these impacts would likely require grade separation of one or more movements. An urban interchange would fully mitigate the deficient conditions at this intersection.

Implementing this mitigation measure would require extensive engineering studies and coordination between the project applicant, the City of Fairfield, Suisun City, and the California Department of Transportation. Constructing an interchange at this location could cost upwards of \$10 million, as documented by the SR 12 MIS completed in 2001. Given the difficulties in implementing this mitigation measure and the cost involved, full implementation cannot be assured in a timely fashion to mitigate the project impact.

Additionally, there is currently insufficient funding for this improvement and no regional mechanisms to collect money for this improvement. For example, Solano County does not have a countywide traffic impact fee program that would fund a regional improvement such as this. The City of Fairfield is a potential funding source for this interchange, although it is uncertain at this time whether there is sufficient funding from other parties to construct the interchange in conjunction with this project.

One other consideration is that the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

SR 12/Marina Blvd

This intersection operates at LOS F during the AM, PM, and Saturday peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection continues to operate at LOS F with increased delay during all time periods. Since the addition of project traffic increases traffic volumes by 4 and 6 percent during the PM and Saturday peak hour, respectively, a significant impact occurs.

Impact A-20: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-20: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require the addition of lanes on nearly all approaches to the intersection. The required improvements would include additional two through travel lanes along SR 12 and addition left and right-turn lanes on nearly all approaches. Alternately, one or more of the movements could require grade separation. A review of this intersection indicates that there is insufficient right-of-way for this improvement. Since the full mitigation required to address this impact cannot be implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Caltrans). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

SR 12/Sunset Avenue

This intersection operates at LOS F during the AM and Saturday peak hours under the Cumulative No Project scenario. The intersection operates at LOS E during the PM peak hour also under the Cumulative No Project scenario. LOS C would be the applicable threshold for this location since the intersection is under the jurisdiction of Caltrans. With the addition of project traffic, the intersection continues to operate at a deficient LOS with increased delay during all time periods. Since the addition of project traffic increases traffic volumes by 3 and 5 percent during the PM and Saturday peak hour, respectively, a significant impact occurs.

Impact A-21: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-21: The mitigation measures identified under Existing Plus Project Scenario recommended a traffic signal optimization. With this mitigation, the intersection would still operate at a deficient LOS during all the peak hours, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the following improvements in addition to the mitigation under Existing Plus Project Scenario – providing two additional through travel lanes along SR 12; constructing an exclusive left-turn lane on the northbound approach; providing an exclusive left-turn lane and a free right-turn lane on the southbound approach. A review of this intersection indicates that there is insufficient right-of-way for this improvement. Additionally, improvements of this magnitude would require a complete reconstruction of the intersection, which is beyond the capability of the project to perform. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Caltrans). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

Cordelia Road/Beck Avenue

This intersection, which operates under stop-sign control, is projected to operate at LOS F during the Cumulative No Project scenario in the PM peak hour. With the addition of project traffic, the intersection would operate at LOS F with increased delays during the PM peak hour. A significant impact occurs since the project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips during the PM peak hour.

Impact A-22: The he project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips during the PM peak hour.

Mitigation A-22: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require the installation of a traffic signal at this location. The project would be responsible for the construction of this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS D or better during all time periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require

approval of an outside agency (Fairfield). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

Cordelia Road/Pennsylvania Avenue

This intersection, which operates under stop-sign control, is projected to operate at LOS F during all the peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection would operate at LOS F with increased delays during all the peak hours. A significant impact would occur if the project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips. Since the addition of project traffic increases traffic volumes by more than 10 trips during all the peak hours, a significant impact occurs. If the Existing Plus Project mitigations are implemented, then the intersection would still operate at LOS F and a significant impact would still occur.

Impact A-23: The he project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips during all the peak hours.

Mitigation A-23: The mitigation measures identified under Existing Plus Project Scenario recommended the installation of a traffic signal. With this mitigation, the intersection would still operate at a LOS F during the PM peak hour, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the addition of an exclusive northbound left-turn lane in addition to the mitigation under Existing Plus Project Scenario. The project would be responsible for the construction of this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C during all time periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans.

Impact after Mitigation: Less than significant

Cordelia Road/Main Street

This intersection, which operates under stop-sign control, is projected to operate at LOS F during the Cumulative No Project scenario in the PM peak hour. With the addition of project traffic, the intersection would operate at LOS F with increased delays during the PM peak hour. Since the addition of project traffic increases traffic volumes by more than 10 trips during the PM peak hour, a significant impact occurs.

Impact A-24: The addition of project traffic causes an increase of more than 10 percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour.

Mitigation A-24: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require the installation of a traffic signal and the additional of an exclusive eastbound left-turn lane. The project would be responsible for the construction of this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all time periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans.

Impact after Mitigation: Less than significant

Lotz Way/Civic Center Boulevard

This intersection, which operates under stop-sign control, is projected to operate at LOS F during the Cumulative No Project scenario in the PM peak hour. This intersection also operates at LOS D during the Saturday Peak Hour. With the addition of project traffic, the intersection would operate at LOS F with increased delays during the PM peak hour and LOS E during the Saturday peak hour. Since the addition of project traffic increases traffic volumes by more than 10 trips during the PM and Saturday peak hours, a significant impact occurs.

Impact A-25: The he project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-25: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require the installation of a traffic signal and the additional of an exclusive eastbound left-turn lane. The project would be responsible for the construction of this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all time periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Caltrans). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

Cordelia Road/Driveway #1

This proposed intersection would be located to the south of Cordelia Road along Pennsylvania Avenue and would provide access to residential area south of the railroad tracks. For purposes of this analysis, this intersection is assumed to operate under side-street stop sign control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS E during the PM peak hour. A significant impact occurs because this intersection would operate unacceptably at LOS E (PM peak hour) after the addition of project traffic.

Impact A-26: The intersection of Cordelia Road/Driveway #1 would operate at LOS E during the PM peak hour. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-26: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require changes in the traffic control at this location. A traffic signal would be required at this location. Prior to installation of a traffic signal, a complete signal warrant analysis should be conducted to verify the need for a traffic signal. After implementation of this mitigation measure, the intersection LOS would be LOS C during all periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant

Cordelia Road/Driveway #2

This proposed intersection would be located to the south of Cordelia Road along Pennsylvania Avenue and would provide access to residential area south of the railroad tracks as well as the Ardave parcel. For purposes of this analysis, this intersection is assumed to operate under side-street stop sign control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is initially assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS E during the PM peak hour. A significant impact occurs because this intersection would operate unacceptably at LOS E during the PM peak hour after the addition of project traffic.

Impact A-27: The intersection of Cordelia Road/Driveway #2 would operate at LOS E during the PM peak hour. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-27: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require the installation of a traffic signal at this location. However, a traffic signal at this location cannot be recommended given the distance to Driveway #1 and the Pennsylvania Avenue/Cordelia Road intersection. Therefore, turn restrictions at this intersection, such as restricting left-out movements, would be recommended. The project applicant would be responsible for the implementation of this mitigation measure. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

Pennsylvania Avenue/Driveway #3

This proposed intersection would be located to the south of SR 12 along Pennsylvania Avenue and would provide access to Planning Areas 1 (secondary access) and 3 (primary access). For purposes of this analysis, this intersection is initially assumed to operate under side-street stop sign control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is initially assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS D during Saturday peak hour, which is indicative of a significant impact.

Impact A-28: The intersection of Pennsylvania Avenue/Driveway #3 would operate at LOS D during the Saturday peak hour after the addition of project traffic. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-28: No mitigation measures were identified under Existing Plus Project Scenario at this location.

This driveway will have to operate as right-in/right-out driveways only. We considered installing a traffic signal but cannot recommend a traffic signal given the distance to the signals at the main project entrance and Pennsylvania Avenue/Cordelia Road. With these modifications, the intersection would operate at LOS C or better during all periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

Pennsylvania Avenue/Driveway #4

This intersection would provide primary access to the main commercial portion of the proposed development. For purposes of this analysis, this intersection is assumed to operate under side-street stop control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS E during the AM peak hour and LOS F during both the PM and Saturday peak hours. Since this LOS would exceed the City's LOS standard of C, a significant impact occurs. If the Existing Plus Approved mitigation measures are implemented, including the installation of a traffic signal, deficient conditions still occur in the Saturday peak hour (LOS D).

Impact A-29: The intersection of Pennsylvania Avenue/Driveway #4 would operate at LOS E in the AM peak hour and LOS F in the PM and Saturday peak hours after the addition of project traffic during all the peak hours. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-29: The mitigation measures identified under Existing Plus Project Scenario recommended the installation of a traffic signal. With this mitigation, the intersection would still operate unacceptably at a LOS E during the Saturday peak hour.

Mitigating this impact would require the additional turn lanes at this intersection, in addition to the traffic signal. With these modifications, the intersection would operate at LOS C or better during all time periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

Pennsylvania Avenue/Driveway #5

This proposed intersection would be located to the south of SR 12 along Pennsylvania Avenue and would provide access to the Gilbert Parcel. For purposes of this analysis, this intersection is assumed to operate under side-street stop control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS F during both the PM and Saturday Peak hours. A significant impact occurs because this intersection would operate unacceptably at LOS F after the addition of project traffic.

Impact A-30: The intersection of Pennsylvania Avenue/Driveway #5 would operate at LOS F after the addition of project traffic during the PM and Saturday peak hours. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-30: The mitigation measures identified under Existing Plus Project Scenario recommended the modification of access control to right-in/right-out only at this location. If this mitigation measure is implemented, then the intersection would operate at LOS D during the PM period, which is indicative of deficient operations. Further mitigation is required, which would include an additional through lane on Pennsylvania Avenue. This additional through lane would create a six-lane section of Pennsylvania Avenue, south of the intersection with SR 12. With this mitigation, the intersection would operate at LOS B or better during all time periods. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

Driveway #4/Internal Roadway

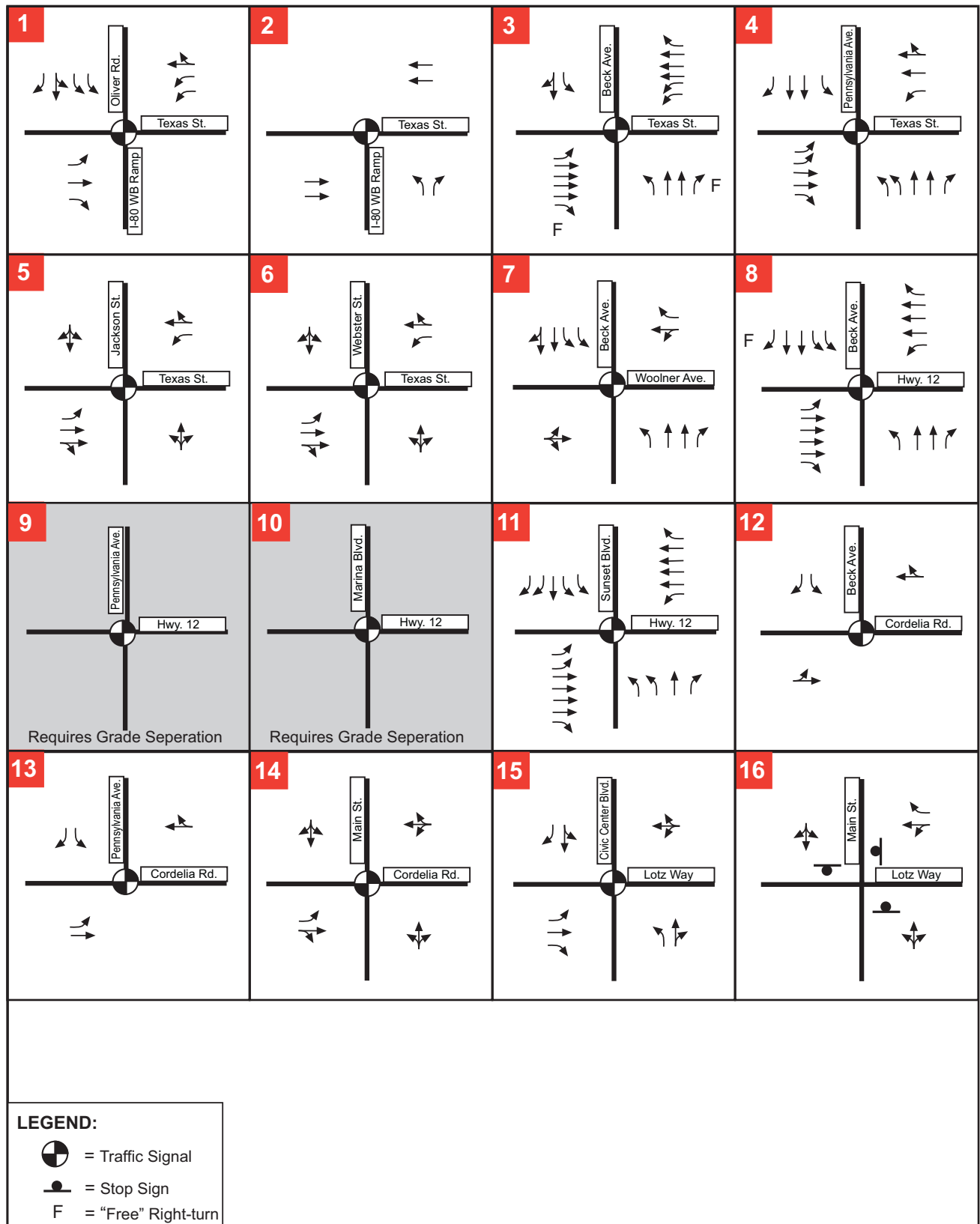
This intersection represents the connection between the major internal roadway on the main commercial site and Driveway #4. Nearly all of the traffic accessing the main commercial site will enter through this intersection while traveling to individual buildings. This analysis assumes that this intersection operates as an all-way stop intersection with one lane approaches in all directions. Based on this assumed configuration, the intersection will operate at LOS F during the PM and Saturday peak hours. This LOS exceeds the City of Suisun City's LOS C standard and a significant impact therefore occurs.

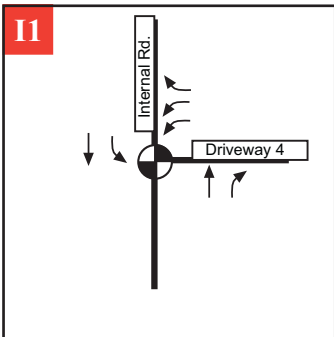
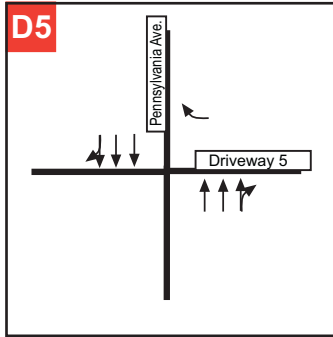
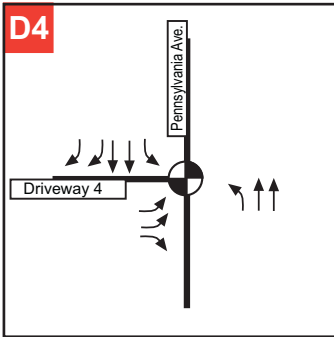
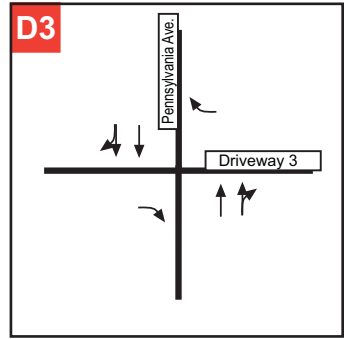
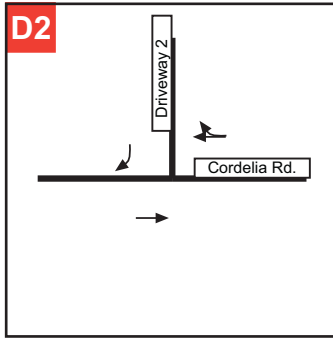
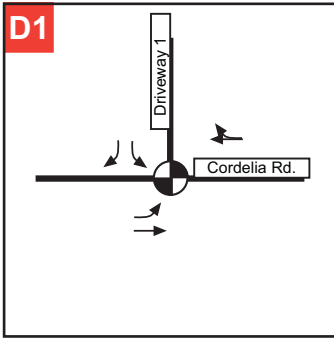
Impact A-31: The intersection of Driveway #4/Internal roadway would operate at LOS F after the addition of project traffic during the PM and Saturday peak hours. A significant impact occurs because this intersection would exceed the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-31: The mitigation measures identified under Existing Plus Project Scenario recommended the addition of a traffic signal at this location. With this improvement, the intersection would operate at LOS B or better during all time periods. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

The improvements required to mitigate the project impacts under the Alternative 1 are shown on Figure 31A (off-site intersections) and Figure 31B (on-site intersections).





LEGEND:



FEHR & PEERS
TRANSPORTATION CONSULTANTS

February 2006
2192-31B

Gentry-Suisun Annexation

**ALTERNATIVE 1 DRIVEWAY CONFIGURATIONS
(CUMULATIVE)**

FIGURE 31B

ALTERNATIVE 2 IMPACTS AND MITIGATIONS

Texas Street/I-80 WB Ramp

Prior to the introduction of project trips, this intersection operates at LOS F during the AM and PM peak hour (greater than 80 seconds of delay). During the Saturday peak hour, the intersection operates at LOS C with 34 seconds of delay. After the addition of project traffic, this intersection operates at LOS F with increased delay during both the AM and PM peak hours and LOS D during the Saturday peak hour. Since the addition of project traffic increases traffic volumes by 3 percent during the PM peak hour and causes the LOS to degrade from LOS C to LOS D during the Saturday peak hour, a significant impact occurs.

Impact A-10: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour. A significant impact also occurs during the Saturday peak hour since the project is responsible for a degradation of the LOS from LOS C to LOS D.

Mitigation A-10: The mitigation measures identified under Existing Plus Project Scenario recommended the addition of an exclusive southbound left-turn lane. With this mitigation, the intersection would operate at LOS E in the AM and PM peak hours, which indicates degraded operations compared to existing conditions.

Mitigating this impact will require the addition of a second exclusive southbound left-turn lane in addition to the mitigation under Existing Plus Project Scenario. The project would fund the installation, which would require the approval of the California Department of Transportation. There appears to be sufficient right-of-way for the construction of this improvement. After implementation of this mitigation measure, the LOS at this intersection LOS would be C or better during all peak hours.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Caltrans). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

Texas Street/I-80 EB Ramp

This intersection operates at LOS E in the PM peak hour prior to the introduction of project trips with a delay of 58 seconds. During the AM peak hour, the intersection operates at LOS C with a delay of 31 seconds. The intersection operates at LOS C with a delay of 23 seconds in the Saturday peak hour. After the addition of project trips, the intersection continues operate at LOS E during the PM period with a delay of 68 seconds. Since the addition of project traffic increases traffic volumes by approximately 3 percent during the PM peak hour, a significant impact occurs.

Impact A-11: The addition of project traffic causes an increase of more than three percent at intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour.

Mitigation A-11: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require a traffic signal retiming. The project would be responsible for the implementation of this mitigation measure, which would require the approval of the California Department

of Transportation. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all peak hours.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Caltrans). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

Texas Street/Beck Avenue

This intersection operates at LOS E during the AM peak hour, LOS F during the PM peak hour, and LOS E during the Saturday peak hour. This LOS currently exceeds the LOS C threshold that is generally applicable to Caltrans facilities. After the addition of project trips, the LOS during the AM and PM peak hour remains E and F and the Saturday LOS degrades from E to F. Since the addition of project traffic increases traffic volumes by 3 and 5 percent during the PM and Saturday peak hour, respectively, a significant impact occurs.

Impact A-12: The addition of project traffic causes an increase of more than three percent at intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-12: The mitigation measures identified under Existing Plus Project Scenario recommended the modification of the westbound right-turn movement from permitted to free movement and optimization of the signal timings at this intersection. With this mitigation, the intersection would still operate at LOS F during the PM peak hour and LOS E during the Saturday peak hour, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the following improvements in addition to the mitigation under Existing Plus Project Scenario – constructing two additional eastbound through lanes; constructing one additional through lane and left-turn lane on the westbound approach; and providing a free right-turn lane and restriping the shared through/right-turn lane to through lane on the northbound approach. Based on a review of the existing intersection configuration, there appears to be insufficient right-of-way to construct these improvements without severely impacting the adjacent buildings and parking lots. No feasible mitigation exists for this deficient condition. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Caltrans). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

Texas Street/Pennsylvania Avenue

This intersection operates at LOS F during the AM, PM, and Saturday peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection continues to operate at LOS F with increased delay during all peak hours. Since the addition of project traffic increases traffic volumes by 5, 10 and 16 percent during the AM, PM, and Saturday peak hour, respectively, a significant impact occurs.

Impact A-13: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during all peak hours.

Mitigation A-13: The mitigation measures identified under Existing Plus Project Scenario recommended the addition of an exclusive right-turn lane and restriping the existing shared through/right-turn lane to exclusive through lane on the southbound approach. With this mitigation, the intersection would still operate at LOS F during the PM peak hour and LOS E during the Saturday peak hour, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the following improvements in addition to the mitigation under Existing Plus Project Scenario – constructing one additional left-turn and through lane on the eastbound approach and providing one additional left-turn lane on the northbound approach. A review of this intersection indicates that there is insufficient right-of-way for this improvement since there are existing buildings and parking lots on all sides of the building. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Fairfield). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

Texas Street/Jackson Street

This intersection operates at LOS F prior to the introduction of project trips during the PM peak hour. The intersection operates at LOS C or better during the other peak hours. With the addition of project traffic, this intersection would operate at LOS F with increased delays during the PM peak hour. Since the addition of project traffic increases traffic volumes by 7 percent during the PM peak hour, a significant impact occurs.

Impact A-14: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour.

Mitigation A-14: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require a major reconstruction of this intersection to add one eastbound through lane along Texas Street. Based on a review of the existing intersection configuration, there appears to be insufficient right-of-way to construct these improvements without severely impacting the adjacent buildings and parking lots. No feasible mitigation exists for this deficient condition. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Fairfield). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

Texas Street/Webster Street

This intersection operates at LOS E prior to the introduction of project trips during the PM peak hour. During the other peak hours, this intersection operates at LOS D or better which is considered acceptable for the City of Fairfield. After the introduction of project trips, this intersection operates at LOS F during the PM peak hour. Since the addition of project traffic increases traffic volumes by 7 percent during the PM peak hour, a significant impact occurs.

Impact A-15: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour.

Mitigation A-15: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require a major reconstruction of this intersection to add one eastbound through lane along Texas Street. Based on a review of the existing intersection configuration, there appears to be insufficient right-of-way to construct these improvements without severely impacting the adjacent buildings and parking lots. No feasible mitigation exists for this deficient condition. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Fairfield). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

Woolner Avenue/Beck Avenue

This intersection operates at LOS F prior to the introduction of project trips during the PM peak hour. During the other peak hours, this intersection operates at LOS C or better which is considered acceptable for the City of Fairfield. After the introduction of project trips, this intersection operates at LOS F during the PM peak hour. A significant impact occurs because the project increases the traffic volume by 3 percent at an intersection that operates at a deficient LOS prior to the introduction of project traffic.

Impact A-16: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hours.

Mitigation A-16: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require the addition of a second left-turn lane on the southbound approach and an exclusive right-turn lane on the northbound approach. Based on a review of the existing intersection configuration, there appears to be insufficient right-of-way to construct these improvements without severely impacting the adjacent buildings and parking lots. No feasible mitigation exists for this deficient condition. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Fairfield). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

SR 12/Beck Avenue

This intersection operates at LOS F during the AM, PM, and Saturday peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection continues to operate at LOS F with increased delay during all peak hours. Since the addition of project traffic increases traffic volumes by 4 and 7 percent during the PM and Saturday peak hour, respectively, a significant impact occurs.

Impact A-17: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours. .

Mitigation A-17: The mitigation measures identified under Existing Plus Project Scenario recommended the addition of an exclusive right-turn lane and restriping the existing shared through/right-turn lane to exclusive through lane on the westbound approach and the addition of the second left-turn lane on the southbound approach. With this mitigation, the intersection would still operate at LOS F during all the peak hours, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the following improvements in addition to the mitigation under Existing Plus Project Scenario – constructing two additional through travel lanes along SR 12; providing an exclusive right-turn lane on the northbound approach; and providing an exclusive free right-turn lane on the southbound approach. A review of this intersection indicates that there is insufficient right-of-way for this improvement. Additionally, improvements of this magnitude would require a complete reconstruction of the intersection, which is beyond the capability of the project to perform. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Caltrans). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

SR 12/Pennsylvania Avenue

This intersection operates at LOS F during the AM, PM, and Saturday peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection continues to operate at LOS F with increased delay during all peak hours. Since the addition of project traffic increases traffic volumes by 7, 16 and 24 percent during the AM, PM, and Saturday peak hour, respectively, a significant impact occurs.

Impact A-18: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during all peak hours.

Mitigation A-18: Mitigating these impacts would likely require grade separation of one or more movements. An urban interchange would fully mitigate the deficient conditions at this intersection.

Implementing this mitigation measure would require extensive engineering studies and coordination between the project applicant, the City of Fairfield, Suisun City, and the California Department of Transportation. Constructing an interchange at this location could cost upwards of \$10 million, as documented by the SR 12 MIS completed in 2001. Given the difficulties in implementing this mitigation measure and the cost involved, full implementation cannot be assured in a timely fashion to mitigate the project impact.

Additionally, there is currently insufficient funding for this improvement and no regional mechanisms to collect money for this improvement. For example, Solano County does not have a countywide traffic impact fee program that would fund a regional improvement such as this. The City of Fairfield is a potential funding source for this interchange, although it is uncertain at this time whether there is sufficient funding from other parties to construct the interchange in conjunction with this project.

One other consideration is that the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency, such as Fairfield. Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and Unavoidable

SR 12/Marina Blvd

This intersection operates at LOS F during the AM, PM, and Saturday peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection continues to operate at LOS F with increased delay during all time periods. Since the addition of project traffic increases traffic volumes by 4 and 5 percent during the PM and Saturday peak hour, respectively, a significant impact occurs.

Impact A-19: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-19: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require the addition of lanes on nearly all approaches to the intersection. The required improvements would include additional two through travel lanes along SR 12 and addition left and right-turn lanes on nearly all approaches. Alternately, one or more of the movements could require grade separation. A review of this intersection indicates that there is insufficient right-of-way for this improvement. Since the full mitigation required to address this impact cannot be implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Caltrans). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

SR 12/Sunset Avenue

This intersection operates at LOS F during the AM and Saturday peak hours under the Cumulative No Project scenario. The intersection operates at LOS E during the PM peak hour also under the Cumulative No Project scenario. LOS C would be the applicable threshold for this location since the intersection is under the jurisdiction of Caltrans. With the addition of project traffic, the intersection continues to operate at a deficient LOS with increased delay during all time periods. Since the addition of project traffic increases traffic volumes by 3 and 4 percent during the PM and Saturday peak hour, respectively, a significant impact occurs.

Impact A-20: The addition of project traffic causes an increase of more than three percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-20: The mitigation measures identified under Existing Plus Project Scenario recommended a traffic signal optimization. With this mitigation, the intersection would still operate at a deficient LOS during all the peak hours, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the following improvements in addition to the mitigation under Existing Plus Project Scenario – providing two additional through travel lanes along SR 12; constructing an exclusive left-turn lane on the northbound approach; providing an exclusive left-turn lane and a free right-turn lane on the southbound approach. A review of this intersection indicates that there is insufficient right-of-way for this improvement. Additionally, improvements of this magnitude would require a complete reconstruction of the intersection, which is beyond the capability of the project to perform. Since the necessary mitigation cannot be successfully implemented, the impact remains significant and unavoidable.

Additionally, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Caltrans). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

Cordelia Road/Beck Avenue

This intersection, which operates under stop-sign control, is projected to operate at LOS F during the Cumulative No Project scenario in the PM peak hour. With the addition of project traffic, the intersection would operate at LOS F with increased delays during the PM peak hour. A significant impact occurs since the project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips during the PM peak hour.

Impact A-21: The he project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips during the PM peak hour.

Mitigation A-21: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require the installation of a traffic signal at this location. The project would be responsible for the construction of this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all time periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require

approval of an outside agency (Fairfield). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable.

Cordelia Road/Pennsylvania Avenue

This intersection, which operates under stop-sign control, is projected to operate at LOS F during all the peak hours under the Cumulative No Project scenario. With the addition of project traffic, the intersection would operate at LOS F with increased delays during all the peak hours. A significant impact would occur if the project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips. Since the addition of project traffic increases traffic volumes by more than 10 trips during all the peak hours, a significant impact occurs

Impact A-22: The he project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips during all the peak hours.

Mitigation A-22: The mitigation measures identified under Existing Plus Project Scenario recommended the installation of a traffic signal. With this mitigation, the intersection would still operate at a LOS F during the PM peak hour, which indicates degraded operations compared to existing conditions.

Mitigating this impact would require the addition of an exclusive northbound left-turn lane in addition to the mitigation under Existing Plus Project Scenario. The project would be responsible for the construction of this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C during all time periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans.

Impact after Mitigation: Less than significant

Cordelia Road/Main Street

This intersection, which operates under stop-sign control, is projected to operate at LOS F during the Cumulative No Project scenario in the PM peak hour. With the addition of project traffic, the intersection would operate at LOS F with increased delays during the PM peak hour. Since the addition of project traffic increases traffic volumes by more than 10 trips during the PM peak hour, a significant impact occurs.

Impact A-23: The addition of project traffic causes an increase of more than 10 percent at an intersection that operates at a deficient level prior to the introduction of project trips during the PM peak hour.

Mitigation A-23: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require the installation of a traffic signal and the additional of an exclusive eastbound left-turn lane. The project would be responsible for the construction of this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all time periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans.

Impact after Mitigation: Less than significant

Lotz Way/Civic Center Boulevard

This intersection, which operates under stop-sign control, is projected to operate at LOS F during the Cumulative No Project scenario in the PM peak hour. This intersection also operates at LOS D during the Saturday Peak Hour. With the addition of project traffic, the intersection would operate at LOS F with increased delays during the PM peak hour and LOS E during the Saturday peak hour. Since the addition of project traffic increases traffic volumes by more than 10 trips during the PM and Saturday peak hours, a significant impact occurs.

Impact A-24: The he project adds more than 10 trips to an unsignalized intersection that operates at a deficient LOS prior to the introduction of project trips during the PM and Saturday peak hours.

Mitigation A-24: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require the installation of a traffic signal and the additional of an exclusive eastbound left-turn lane. The project would be responsible for the construction of this improvement. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all time periods.

However, the City of Suisun lacks jurisdiction over this intersection and can not implement this mitigation measure or oversee its implementation. Implementation of this mitigation measure would require approval of an outside agency (Fairfield). Since we can not assure that this mitigation can be successfully implemented, we can conclude that this impact is significant and unavoidable.

Impact after Mitigation: Significant and unavoidable

Cordelia Road/Driveway #1

This proposed intersection would be located to the south of Cordelia Road along Pennsylvania Avenue and would provide access to residential area south of the railroad tracks. For purposes of this analysis, this intersection is assumed to operate under side-street stop sign control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS E during the PM peak hour. A significant impact occurs because this intersection would operate unacceptably at LOS E (PM peak hour) after the addition of project traffic.

Impact A-25: The intersection of Cordelia Road/Driveway #1 would operate at LOS E during the PM peak hour. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-25: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact would require changes in the traffic control at this location. A traffic signal would be required at this location. Prior to installation of a traffic signal, a complete signal warrant analysis should be conducted to verify the need for a traffic signal. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant

Cordelia Road/Driveway #2

This proposed intersection would be located to the south of Cordelia Road along Pennsylvania Avenue and would provide access to residential area south of the railroad tracks as well as the Ardave parcel. For purposes of this analysis, this intersection is assumed to operate under side-street stop sign control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is initially assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS E during the PM peak hour. A significant impact occurs because this intersection would operate unacceptably at LOS E during the PM peak hour after the addition of project traffic.

Impact A-26: The intersection of Cordelia Road/Driveway #2 would operate at LOS E during the PM peak hour. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-26: No mitigation measures were identified under Existing Plus Project Scenario at this location.

Mitigating this impact will require the installation of a traffic signal at this location. However, a traffic signal at this location cannot be recommended given the distance to Driveway #1 and the Pennsylvania Avenue/Cordelia Road intersection. Therefore, turn restrictions at this intersection, such as restricting left-out movements, would be recommended. The project applicant would be responsible for the implementation of this mitigation measure. After implementation of this mitigation measure, the intersection LOS would be LOS C or better during all periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans.

The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

Pennsylvania Avenue/Driveway #3

This proposed intersection would be located to the south of SR 12 along Pennsylvania Avenue and would provide access to Planning Areas 1 (secondary access) and 3 (primary access). For purposes of this analysis, this intersection is assumed to operate under side-street stop sign control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is initially assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS F during both the PM and Saturday peak hours. A significant impact occurs because this intersection would operate unacceptably at LOS F during both the PM and Saturday peak hours after the addition of project traffic.

Impact A-27: The intersection of Pennsylvania Avenue/Driveway #3 would operate at LOS F during the PM and Saturday peak hours after the addition of project traffic. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-27: No mitigation measures were identified under Existing Plus Project Scenario at this location.

This driveway will have to operate as right-in/right-out driveways only. We considered installing a traffic signal but cannot recommend a traffic signal given the distance to the signals at the main project entrance and Pennsylvania Avenue/Cordelia Road. With these modifications, the intersection would operate at LOS C or better during all periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans. The

recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

Pennsylvania Avenue/Driveway #4

This intersection would provide primary access to the main commercial portion of the proposed development. For purposes of this analysis, this intersection is assumed to operate under side-street stop control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS E during the AM peak hour and LOS F during both the PM and Saturday peak hours. Since this LOS would exceed the City's LOS standard of C, a significant impact occurs. If the Existing Plus Approved mitigation measures are implemented, including the installation of a traffic signal, deficient conditions still occur in the Saturday peak hour (LOS D).

Impact A-28: The intersection of Pennsylvania Avenue/Driveway #4 would operate at LOS E in the AM peak hour and LOS F in the PM and Saturday peak hours after the addition of project traffic during all the peak hours. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City. An impact still occurs if the Existing Plus Project mitigations are implemented as the Saturday peak hour LOS is still D.

Mitigation A-28: The mitigation measures identified under Existing Plus Project Scenario recommended the installation of a traffic signal. With this mitigation, the intersection would still operate unacceptably at a LOS D during the Saturday peak hour.

Mitigating this impact would require the additional turn lanes at this intersection, in addition to the traffic signal. With these modifications, the intersection would operate at LOS C or better during all time periods. Since this intersection is under the jurisdiction of the City of Suisun City, improvements at this location do not require the approval of the City of Fairfield or Caltrans. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

Pennsylvania Avenue/Driveway #5

This proposed intersection would be located to the south of SR 12 along Pennsylvania Avenue and would provide access to the Gilbert Parcel. For purposes of this analysis, this intersection is assumed to operate under side-street stop control and all turning movements are assumed to occur at this intersection. Additionally, Pennsylvania Avenue is assumed to have two lanes at this location. With these assumptions, the intersection would operate at LOS E during PM and LOS F during the Saturday Peak hours. A significant impact occurs because this intersection would operate unacceptably at LOS D and LOS F after the addition of project traffic.

Impact A-29: The intersection of Pennsylvania Avenue/Driveway #5 would operate at LOS E after the addition of project traffic during the PM and LOS F during the Saturday peak hours. A significant impact occurs because this intersection exceeds the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-29: The mitigating this impact requires thmodification of access control to right-in/right-out only at this location. With this mitigation, the intersection would operate at LOS B or better during all time periods. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

Driveway #4/Internal Roadway

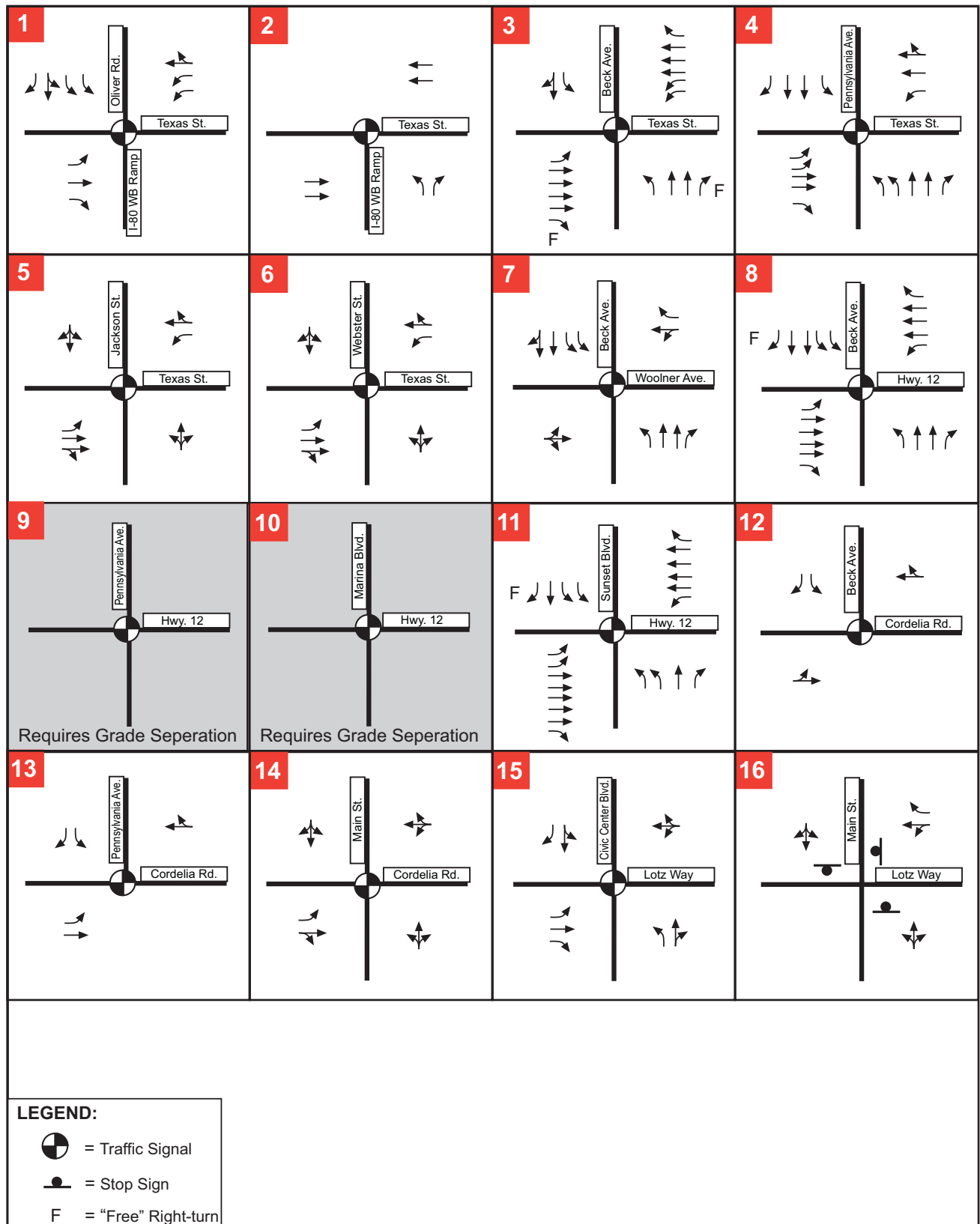
This intersection represents the connection between the major internal roadway on the main commercial site and Driveway #4. Nearly all of the traffic accessing the main commercial site will enter through this intersection while traveling to individual buildings. This analysis assumes that this intersection operates as an all-way stop intersection with one lane approaches in all directions. Based on this assumed configuration, the intersection will operate at LOS D during the PM and LOS F during the Saturday peak hours. This LOS exceeds the City of Suisun City's LOS C standard and a significant impact therefore occurs.

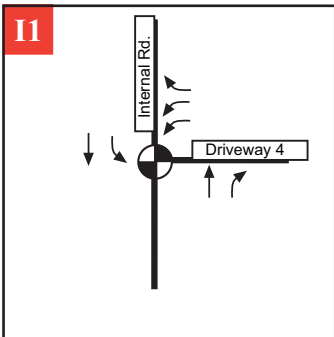
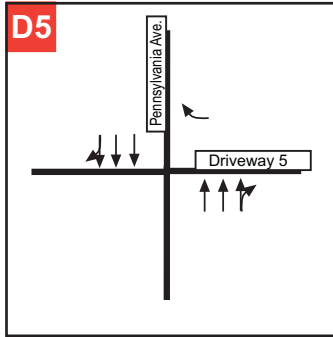
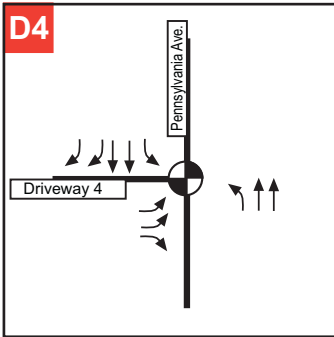
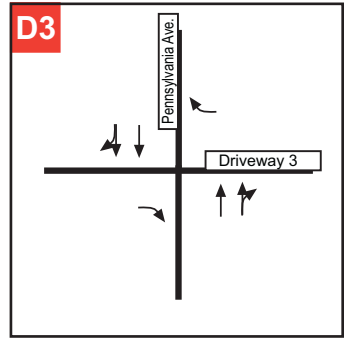
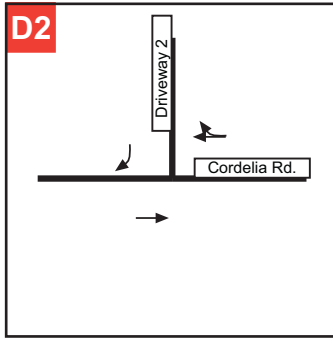
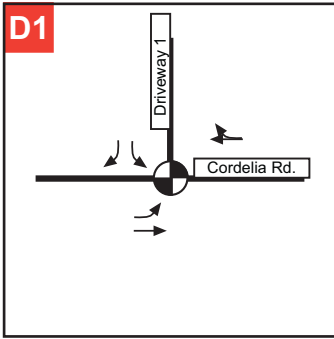
Impact A-30: The intersection of Driveway #4/Internal roadway would operate at LOS D after the addition of project traffic during the PM and LOS F during the Saturday peak hours. A significant impact occurs because this intersection would exceed the LOS C threshold which is considered acceptable by Suisun City.

Mitigation A-30: The mitigation measures identified under Existing Plus Project Scenario recommended the addition of a traffic signal at this location. With this improvement, the intersection would operate at LOS B or better during all time periods. The recommended lane configurations for this intersection are discussed in Chapter 12, relating to site access and circulation.

Impact after Mitigation: Less than significant.

The improvements required to mitigate the project impacts under the Alternative 2 are shown on Figure 32A (off-site intersections) and Figure 32B (on-site intersections).





LEGEND:



FEHR & PEERS
TRANSPORTATION CONSULTANTS

February 2006
2192-32B

Gentry-Suisun Annexation

**ALTERNATIVE 2 DRIVEWAY CONFIGURATIONS
(CUMULATIVE)**

FIGURE 32B

8. ROADWAY NETWORK- PROJECT IMPACTS

This chapter determines if the proposed project creates a significant impact relating to the roadway network and addresses consistency with planned improvements, adopted plans and policies, and construction traffic impacts. For each of these items, the significance criteria are presented along with an evaluation of the project's impact. When appropriate, mitigation measures are presented. We anticipated that roadway network impacts and mitigations would be the same under the Base Project, Alternative 1, and Alternative 2.

PLANNED ROADWAY IMPROVEMENTS

Significance Criteria

The following significance criteria will be applied:

A significant impact occurs if the project interferes with, conflicts with or precludes other planning improvements such as roadway extensions/expansion, planned trail facilities, proposed creek restoration projects, etc.

This significance criteria addresses any possible conflicts between the proposed development project and planned roadway improvements in the study area. Roadway improvements include new roadways as well as the expansion of existing roadways.

Project Impact

Based on a review of the project site plan, the project site plan could potentially conflict with a proposed interchange at the intersection of SR 12/Pennsylvania Avenue. At this time, no design plans for the interchange currently exist. To determine whether proposed development on the site would conflict with development of an interchange, the project applicant developed several conceptual interchange configurations. These configurations were reviewed by STA staff and the City of Suisun City staff at a meeting in October 18, 2005. At this meeting the STA concluded that the project would not preclude future construction of an interchange at this intersection and the impact is less than significant.

ADOPTED PLANS AND POLICIES REGARDING ROADWAYS

Significance Criteria

The following significance criteria will be applied:

A significant impact occurs if the project conflicts or creates inconsistencies with adopted traffic plans, guidelines, policies, or standards.

For purposes of this analysis, we interpret this criteria as it relate to transportation components of the project, which would include main off-site roadway improvements. The analysis determines whether roadways that would be constructed by the project are consistent with standard design templates such as those provided by the Caltrans or the American Association of State Highway Transportation Officials (AASHTO). Caltrans, in their *Highway Design Manual* (5th Edition) recommends the use of standards from AASHTO for non-state facilities (Section 308.1). This review focuses on cross-section elements of roadway improvements including travel lanes, medians, and sidewalks.

Project Impact

The project site plan indicates that Pennsylvania Avenue and Cordelia Road adjacent to the project will be reconstructed in conjunction with the project. This reconstruction will be necessary to accommodate the additional lanes required at the project entrances. It is anticipated that Pennsylvania Avenue and Cordelia Road will be reconstructed as four lane roadways with medians. This widening will extend along the project frontage.

The project site plan indicates that these roadways would have 12 feet wide travel lanes, which are consistent with standards provided AASHTO. The medians shown on the site plan also exceed the AASHTO standards. However, the project site plan does not provide additional detail for items such as sidewalks and cross-walks.

Impact B-1: The project site plan does not show important cross-sectional elements such as sidewalks.

Mitigation B-1: At a minimum, the project site plan should be revised to confirm the presence or absence of sidewalks along Pennsylvania Avenue and Cordelia Road. Including sidewalks would allow Fehr & Peers to confirm that the sidewalks meet AASHTO standards. Alternately, the project applicant could prepare a cross-section for Pennsylvania Avenue and Cordelia Road to demonstrate that the major cross-section elements are consistent with AASHTO standards.

Impact after Mitigation: Less than significant

CONSTRUCTION TRAFFIC IMPACT

Significance Criteria

The following significance criteria will be applied to determine if there is construction traffic related impact:

A significant impact occurs if the construction of a project creates a temporary but prolonged impact due to lane closures, the need for temporary signals, emergency vehicle access, traffic hazards to bikes and pedestrians, damage to roadbed, truck traffic on roadways not designated as truck routes, etc.

For purposes of this analysis, construction traffic impacts are assessed for both the project itself as well as the widening of Pennsylvania Avenue and Cordelia Road, which are identified as project mitigation measures.

Project Impact

It is expected that a construction-related traffic impact will occur based on the following considerations:

- The project is large in size and includes over 700 KSF of commercial buildings, 359 residences, and a small office/industrial park under the Base Project. Even under Alternatives 1 and 2, approximately 400-500 KSF of commercial space will be constructed with up to 542 dwelling units.
- Construction activities would occur on multiple parcels that lack direct connections except along existing public roadways
- Pennsylvania Avenue and Cordelia Road along the project frontage will be widened from two to four-lanes. During this widening process, traffic along these roadways would either be diverted or delayed.
- Direct access to the site would be limited to Pennsylvania Avenue and Cordelia Road so there are no alternate routes that construction vehicles could take to access the site

- Given the size of the project, we would expect construction activities to extend for a period of 18 months to 2 years at a minimum.

Impact B-2: Construction activities associated with this project would create a traffic impact during the construction period. Impacts would result from the import of workers to the site, the movement of heavy vehicles to the site, and the daily influx of materials to the site. Additionally, widening the adjacent roadways would exacerbate impacts associated with the site as well as create an inconvenience for drivers using these roadways currently.

Mitigation B-2: Mitigating this impact would require the preparation of a construction traffic management plan. This plan should include the following items:

- A map documenting material and equipment staging and storage locations for all phases of construction (must be located on the project site)
- A map documenting worker parking locations for all phases of construction (must be located on the project site)
- Notification procedures for adjacent businesses, residents, property owners and public safety personnel for all major deliveries, detours, and land and/or street closures that will affect traffic in the vicinity of the project
- Provisions for monitoring surface streets used for truck routes so that any damage and debris attributable to the trucks can be identified and corrected
- Signage plans documenting any detours for bicycle and pedestrian traffic
- Routing plans for construction vehicles and construction equipment from the project site

The project applicant will develop this plan prior to the initiation of any construction activities on-site and this plan will be subject to review and approval by the City of Suisun City. It is anticipated that this Construction Traffic Management Plan will be developed in the context of a larger Construction Management Plan, which will address other issues such as hours of construction on site, limitations on noise and dust emissions, and other applicable items.

Impact after Mitigation: Less than significant

9. TRANSIT SYSTEM- PROJECT IMPACTS

This chapter discusses impacts related to the transit system. Potential impacts could include disruptions to existing transit service, interference with planned transit facilities, conflicts with adopted transit system plans, guidelines, policies, or standards, and creation of demand for public transit above the available capacity. We anticipate that the impacts and mitigations measures for transit impacts will be the same for the Base Project, Alternative 1, and Alternative 2.

DISRUPTIONS TO EXISTING TRANSIT SERVICE

Significance Criteria

The following significance criteria will be applied to determine if the project is responsible for a disruption of existing transit services or facilities:

A significant impact occurs if a project or project-related mitigation disrupts existing transit services or facilities. This includes disruptions caused by proposed project driveways on transit streets and impacts to transit stops/shelters; and impacts to transit operations from traffic improvements proposed or resulting from a project.

Project Impact

As stated previously, the Route 5 bus operated by the Fairfield/Suisun Transit System travels along the project frontage along Pennsylvania Avenue. At the project buildout, it is expected that there will be limited disruption to the operation of this route because of the additional driveways along Pennsylvania Avenue. There could be some additional delay due to traffic turning into and out of the driveways but this delay is expected to be minimal. However, there will be two travel lanes in each direction so a bus could utilize the other travel lane, should the curbside line become obstructed at the driveway. Some additional delay could also occur at the main project entrance, which is recommended for signalization. Again, this delay would be minimal given the short cycle time of this signal. It is expected that the project would not create significant delay for the Route 5 bus.

There are no existing transit stops and shelters that would be impacted by the project given that the nearest bus stop is located to the north of SR 12 along Pennsylvania Avenue. Therefore, the project will not be impacting existing stops and shelters.

While it is likely the project would create minimal disruptions to the existing Route 5 at buildout, the construction activities associated with the project can disrupt transit operations. Major disruptions to the Route 5 service are likely to occur when Pennsylvania Avenue is reconstructed. For example, it is likely that there could be temporary lane closures, lane shifts, and other activities that can delay the operations of the Route 5 bus. Therefore, Roadway construction activities will likely delay bus operations along Pennsylvania Avenue creating a significant traffic impact.

Impact C-1: Construction activities along Pennsylvania Avenue can disrupt operation of the Route 5 bus. The roadway construction activities are likely to create delay for transit vehicles along Pennsylvania Avenue. It is anticipated that this impact will be temporary and will only occur while Pennsylvania Avenue is reconstructed.

Mitigation C-1: The project's construction traffic management plan, discussed in Mitigation B-3 should include a provision that the project applicant notify and coordinate construction activities along Pennsylvania Avenue with the Fairfield/Suisun Transit System.

Impact after Mitigation: Less than significant

INTERFERENCE WITH PLANNED TRANSIT SERVICES

Significance Criteria

The following significance criteria will be applied:

A significant impact occurs if a project interferes with planned transit services or facilities.

Project Impact

As mentioned previously, the STA is proposing to develop intercity transit service that would extend from Napa to Rio Vista. This route would run along SR 12, including the section of SR 12 which borders on the project site. This service is currently unfunded and would only be instituted if funding becomes available.

It is anticipated that the development of this site would not negatively impact the operations of this service along SR 12 for several reasons. A majority of the project driveways would be found on Pennsylvania Avenue, not SR 12. The only project driveway on SR 12 occurs under a variant of the project site plan which proposes to have a single right-in/right-out driveway along SR 12. Given the dearth of new driveways on SR 12, it is unlikely that development of the project would negatively impact the planned intercity service along SR 12. Additionally, the project is not reconstructing SR 12 or modifying the roadway, as in the case of Pennsylvania Avenue.

PROJECT CONFLICTS OR CREATES INCONSISTENCIES WITH ADOPTED TRANSIT SYSTEM PLANS, GUIDELINES, POLICIES, OR STANDARDS

Significance Criteria

The following significance criteria regarding consistency with adopted transit plans, guidelines, policies, or standards will be applied:

A significant impact occurs if a project conflicts or creates inconsistencies with adopted transit system plans, guidelines, policies, or standards.

Project Impact

The regional transportation planning agency for Solano County, the Solano Transportation Authority (STA) recently updated its Comprehensive Transportation Plan (CTP). In this document, the STA adopted the following goal related to public transit:

- Develop a comprehensive transit system for buses, rail, and ferries to meet future demand

Five objectives were also adopted relating to this goal. These objectives include:

- Convenient Public Transit
- New Service

- Efficient Transit
- Multi-Model System
- Environmental Justice

Each of these objectives relate to improving existing transit service and providing new service transit service throughout Solano County. These objectives are implemented through policy actions, such as:

- Provide intercity service coverage with convenient access for the County's population (Objective A)
- Provide reliable service (Objective B)
- Provide comfortable, safe, and passenger friendly stop facilities (Objective B)
- Provide a choice of model in the I-80 and I-680 corridors (Objective B)
- Balance service supply with passenger demands (Objective C)
- Provide safe and convenient pedestrian access to intercity service stops (Objective D)

The project does not create a conflict or inconsistency with any of the goals or policies listed in the STA document and summarized above. The only impact on transit service occurs during the reconstruction of Pennsylvania Avenue. Additionally, the proposed intercity service on SR 12 is not impacted by the project. Given the minimal conflict between the project and the existing and future transit service in the study area, no impact occurs under this criteria.

DEMAND FOR PUBLIC TRANSIT SERVICES ABOVE CAPACITY

Significance Criteria

The following significance criteria will be applied:

A significant impact occurs if the project creates demand for public transit service above the capacity which is provided, or planned.

Project Impact

It is anticipated that this project will generate a minimal demand for public transit services, based on the following considerations:

- The project is located in Solano County, which has a lower rate of transit usage than other regions of the San Francisco Bay Area. For example, about 2 percent of all work trips in Solano County occur using transit. Of these trips about one-half use a bus while the other take a train, ferry, or other modes (2000 US Census)
- There is no existing transit service to the site. The nearest transit stations are one-half to one mile away
- Retail developments, particularly big-box retail, are generally perceived as being unfriendly to transit users. For example, a transit user accessing the site would have to walk across parking areas to access individual shops.

Under a best-case scenario for transit, the number of transit users is not likely to exceed 1 percent of the peak hour trips associated with the project, based on an application of the Census data. Therefore, the number of transit users during a peak hour would be 20, a majority of which would be expected to use the Route 5 Bus. A small number (1-2 persons) could be expected to use the Capital Corridor AMTRAK service. These transit users would likely ride the Route 5 bus to the Suisun City AMTRAK station. During the peak hour, there are 2 buses per hour. This number of buses can easily accommodate these additional riders, even under a best-case scenario for transit usage. Given this minimal transit demand, there is no significant impact under this criteria.

10. BICYCLE NETWORK- PROJECT IMPACTS

This chapter reviews project related impacts on the bicycle network in the study area. Potential impacts include disruptions on existing facilities, interference with planned facilities, and conflicts with adopted plans, guidelines, policies, or standards relating to bicycles. We anticipate that the impacts and mitigations measures for the bicycle network will be the same for the Base Project, Alternative 1, and Alternative 2.

DISRUPTIONS TO EXISTING FACILITIES

Significance Criteria

The following significance criteria will be applied:

A significant impact occurs if a project disrupts existing bicycle facilities

Project Impact

As mentioned previously, there are no bicycle facilities which border on or are located within the project site. Therefore, there is no disruption to existing facilities attributable to the project.

PROJECT INTERFERES WITH PLANNED BICYCLE FACILITIES

Significance Criteria

The following significance criteria will be applied to determine if the project conflicts with planned facilities:

A significant impact occurs if a project interferes with planned bicycle facilities. This includes failure to dedicate right-of-way for planned on- and off-street bicycle facilities included in an adopted Bicycle Master Plan or to contribute towards construction of planned bicycle facilities along the project frontage.

Project Impact

The only planned bicycle facility that could be constructed in the study area is the Central County Bikeway. However, this project would not extend to the project site and would not be affected by any of the development activities on the site.

PROJECT CONFLICTS WITH ADOPTED BICYCLE SYSTEM PLANS, GUIDELINES, POLICIES, OR STANDARDS

Significance Criteria

A significant impact occurs if the project conflicts or create inconsistencies with adopted bicycle system, plans, guidelines, policies, or standards.

Project Impact

Solano County recently updated its Countywide Bicycle Plan in 2004. This document outlines several objectives and policies which relate to bicycle facilities. Major objectives include:

- Maximize increased use of bicycles and the development of a comprehensive regional bikeway system as a viable alternative to the automobile (Objective #1)
- Develop a countywide bikeways system that meets the needs of commuters and recreation bicyclists, helps reduce vehicle trips, and links residential neighborhoods with destinations countywide (Objective #4)
- Improve bicycle safety conditions in Solano County (Objective #6)

Major policies under these objectives include:

- 3.5- Strive for the inclusion of bicycle facilities in the development of all new road, and roadway improvement projects
- 3.6- Ensure that new roadways, transportation projects, and developments improve bicycle travel and system continuity
- 4.1- Develop a commuter bikeway system that provides direct routes between residential neighborhoods and regional employment areas, schools, and universities
- 6.7- Incorporate provisions for safe bicycle travel and/or detours in traffic control plans and through construction zones

Based on the current project site plan, there are no bicycle facilities shown. Since the project does not include any bicycle facilities, either on-street or off-street facilities, it can be considered to be inconsistent with the above policies, such as 3.5, 3.6, and 4.1. For example, there are no bicycle connections between the residential and commercial areas of the project, which would seem to conflict with policy 4.1.

Impact D-1: The project site plan does not explicitly include any bicycle facilities either within the site or along the perimeter of the site.

Mitigation D-1: The project site plan should be revised to indicate bicycle facilities. Possible options include an off-street path along Pennsylvania Avenue or including in-street bicycle lanes on Pennsylvania Avenue and Cordelia Road.

Impact After Mitigation: Less than significant

11. PEDESTRIAN NETWORK- PROJECT IMPACTS

This chapter reviews project related impacts on the pedestrian network in the study area. Potential impacts include disruptions on existing facilities, interference with planned facilities, and conflicts with adopted plans, guidelines, policies, or standards relating to pedestrians. We anticipate that the impacts and mitigations measures for the pedestrian network will be the same for the Base Project, Alternative 1, and Alternative 2.

DISRUPTIONS TO EXISTING FACILITIES

Significance Criteria

The following significance criteria will be applied:

A significant impact occurs if a project disrupts existing pedestrian facilities. This can include adding new vehicular, pedestrian, or bicycle traffic experiencing pedestrian safety concerns such as an adjacent crosswalk or school, particularly if the added traffic reduce the number of pedestrian acceptable gaps at an unsignalized crossing or causes queues to spillback through pedestrian crossings.

Project Impact

As mentioned previously, there are no pedestrian facilities which border on or are located within the project site. Therefore, there is no disruption to existing facilities attributable to the project.

PROJECT INTERFERES WITH PLANNED BICYCLE FACILITIES

Significance Criteria

The following significance criteria will be applied to determine if the project conflicts with planned facilities:

A significant impact occurs if a project interferes with pedestrian facilities. In existing or planned urbanized areas, main streets or pedestrian districts, this can include impacts to the quality of the walking environment.

Project Impact

The only planned pedestrian facility that could be constructed in the study area is the Central County Bikeway. However, this project would not extend to the project site and would not be affected by any of the development activities on the site.

Additionally, the project is not located in an urbanized area, along a main street, a pedestrian district, or an area of high pedestrian volumes. Therefore, development of the project site will not impact the quality of the walking environment.

PROJECT CONFLICTS WITH ADOPTED PEDESTRIAN SYSTEM PLANS, GUIDELINES, POLICIES, OR STANDARDS

Significance Criteria

A significant impact occurs if a project conflicts or creates inconsistencies with adopted pedestrian system plans, guidelines, policies, or standards.

Project Impact

Solano County recently updated its Countywide Pedestrian Plan in 2004. This document outlines several objectives and policies which relate to bicycle facilities. Major objectives include:

- Secure significant benefits for Solano County by preserving, creating, and enhancing pedestrian routes and places, including (Objective #1)
- Ensure that safety for pedestrians, especially young people, old people, and people with disabilities, is the highest priority among competing pedestrian improvement priorities, and a high priority among overall transportation improvement priorities (Objective #2)
- Support and coordinate the planning of pedestrian connections, improvements, and pedestrian-oriented development throughout Solano County (Objective #6)

Major policies under these objectives include:

- Objective #2, Policy 4- Follow the latest standards and best practices for design of safe pedestrian facilities, starting from references provided in this Plan
- Objective #3, Policy 1- Encourage local jurisdictions to make safe, convenient, enjoyable pedestrian access a priority in their policies, plans, and projects
- Objective #3, Policy 6- The highest priority pedestrian improvements should be those where pedestrian facilities are lack or deficient in close proximity (1/4 to 1/2 mile) to pedestrian destinations such as schools, parks, transit, and shopping.
- Objective #3, Policy 8- Ensure that pedestrian improvements meet applicable standards for access to people with disabilities.

A review of the project site plan indicates that on-site pedestrian facilities are provided, including pedestrian pathways throughout the site and along with crosswalks at internal intersections. The project site plan does not detail pedestrian improvements, such as sidewalks along the project frontage with Pennsylvania Avenue. Given this lack of pedestrian facilities along Pennsylvania Avenue, it may be difficult for residents of the residential areas of the project to walk to the retail center. Given the lack of pedestrian facilities on Pennsylvania Avenue, a significant impact occurs since it conflicts with several of the policy statements above.

Impact E-1: The project site plan does not provide pedestrian facilities on Pennsylvania Avenue. This omission of facilities conflicts with policy statements such as Objective #3, Policy 1.

Mitigation E-1: Revise the project site plan to include pedestrian facilities on Pennsylvania Avenue.

Impact After Mitigation: Less than significant

12. PROJECT SITE PLAN REVIEW

This chapter reviews the project site plan and considers on-site circulation and access, on-site parking for vehicles and bicycles, pedestrian connections within the site and to adjacent locations, delivery vehicle access, and access management standards. Please note that the site plan provided includes detailed descriptions for Planning Area #1, Planning Area #2, and Planning Area #3. Detailed site plans are not available for the Gilbert and Ardave parcels.

PROJECT OVERVIEW

The project site could have up to five major driveway locations. Two of these driveway locations are located on along Cordelia Road south of the existing railroad tracks. Three driveways are located north of the railroad tracks along Pennsylvania Avenue. The users of each driveway could vary based on the site plan and are described below.

Base Project

- Driveway #1- Planning Area #2 only
- Driveway #2- Planning Area #2 and access to Ardave Parcel
- Driveway #3- Secondary access to commercial center and primary access to Planning Area #3
- Driveway #4- Main access to commercial center (this intersection is proposed to be signalized)
- Driveway #5- Access to Gilbert Parcel with right-in/right-out access to Planning Area #1. According to the site plan, the right-in and right-out are separated by approximately 100 feet but are combined for the purposes of the traffic analysis

There is also a minor driveway located along Pennsylvania Avenue between Driveway #3 and Cordelia Road. We anticipate that this driveway would be used only for deliveries and loading activities at the rear of the main commercial buildings.

Alternative 1

- Driveway #1- Planning Area #2 only
- Driveway #2- Planning Area #2 and access to Ardave Parcel
- Driveway #3- Secondary access to commercial center and primary access to Planning Area #3
- Driveway #4- Main access to commercial center (this intersection is proposed to be signalized)
- Driveway #5- Access to Gilbert Parcel with right-in/right-out access to Planning Area #1. On this site plan, the right-in/right-out driveway for Planning Area #1 is located at a single point.

There is also a minor driveway located along Pennsylvania Avenue between Driveway #3 and Cordelia Road. We anticipate that this driveway would be used only for deliveries and loading activities at the rear of the main commercial buildings.

Alternative 2

- Driveway #1- Planning Area #2 only
- Driveway #2- Planning Area #2 and access to Ardave Parcel
- Driveway #3- Secondary access to commercial center and primary access to Planning Area #3
- Driveway #4- Main access to commercial center (this intersection is proposed to be signalized)
- Driveway #5- Access to Gilbert Parcel with right-in/right-out access to Planning Area #1. On this site plan, the right-in/right-out driveway for Planning Area #1 is located at a single point.

As compared to the other site plans, this alternative lacks a dedicated delivery driveway along Pennsylvania Avenue. Deliveries would likely occur through Driveways #3 or #4.

PROJECT ON-SITE CIRCULATION AND ACCESS

Significance Criteria

A significant impact occurs if the project designs for on-site circulation, access, and parking areas fail to meet industry standard design guidelines.

Project Impact

This review of on-site circulation and access considers the following items:

1. Are all areas of the site accessible from each other?
2. Does the project site plan contain dead-end drive aisles, which complicate on-site circulation?
3. Does the internal roadway network provide sufficient capacity for the anticipated level of traffic volumes?
4. Do the internal project intersections provide an acceptable LOS?
5. Are the internal intersections adequately spaced?
6. Do the project driveways operate at an acceptable level of service (LOS), which ensures easy access to the project site?
7. Is there adequate space available to accommodate the anticipated queuing at the project driveways?

Intra-Site Accessibility

The project site plan includes a network of internal roadways which facilitate travel within each project site. In Planning Area #1, the main internal roadway is an east west roadway which extends from terminus of Driveway #4 to the western boundary of the commercial site. The main project access (Driveway #4) extends from this major east-west roadway to Pennsylvania Avenue and would carry a majority of the entering and exiting the site. This internal roadway is found on all project site plans including the Base Project, Alternative 1, and Alternative 2.

It is anticipated that the internal roadway within Planning Area #1 would be a two-lane roadway. The various parking areas within the project site would be accessible via this main internal roadway. This degree of intra-site

accessibility is sufficient since all areas of the Planning Area #1 are accessible to each other via an internal roadway network.

The drawings of Planning Areas #2 and #3 also indicate that these residential areas will also have an internal roadway network, which will provide adequate intra-site accessibility for these sites as well.

Dead-End Drive Aisles

A dead-end drive aisle, which occurs when a drive aisle is open on one end only, complicates internal circulation and should be discouraged. A review of the project site plan indicates that there are no dead-end drive aisles shown on any of the proposed project site plans.

Internal Roadway Network Capacity

Given the projected volumes along this internal roadway, a two-lane roadway should provide sufficient capacity within Planning Area #1. However, additional turn lanes will be required along the main project entrance at Driveway #4. These additional turn lanes would be needed to accommodate the vehicles turning into the project site, a majority of which would then turn left at the first internal intersection, given the layout of the project site. The left-turn movement at this intersection would be matched by the corresponding right-turn movement for drivers turning from the major internal roadway to Driveway #4. The recommended geometrics for this intersection are discussed in Chapters 6 and 7 for each alternative.

The internal roadway within Planning Areas #2 and #3 are anticipated to operate as two-lane roadways, which will be more than sufficient for the anticipated traffic levels.

Internal Intersection Operation

It is anticipated that the internal intersections would operate under side-street stop-sign control except for the intersection located at the terminus of Driveway #4, which is recommended for signalization under the Base Project, Alternative 1, and Alternative 2. Stop signs would control traffic turning onto the main internal roadway. Traffic on the main internal roadway would not operate under traffic control. Please note that the project site plan does not indicate internal traffic control devices.

Spacing of Internal Intersections

For purposes of this analysis, an internal intersection is defined as a location where a driveway, parking aisle, or internal roadway connects to a major internal roadway. A major internal roadway is defined as either the major east-west roadway or Driveway #4.

The City of Suisun City does not provide intersection spacing standards. One option to set driveway spacing standards would be to employ sight distance criteria. Since these internal intersections are not located on a major public street, such as Pennsylvania Avenue, the most appropriate method to set the sight distance would be to use stopping sight distance criteria, which is outlined in the Caltrans *Highway Design Manual* Table 201.1. Assuming a speed of 25 miles per hour, the minimum distance between driveways would be 150 feet. As indicated on the site plan, many of the internal driveways are equal to or greater than 150 feet. There appear to be several internal intersections in Planning Area #1 which may have inadequate spacing.

Project Driveway Operation

As detailed in Chapters 6 and 7, several of the project driveways will operate at a deficient condition prior to the widening of Pennsylvania Avenue. Additional improvements will be required at several driveways. A Traffic

signal will be required at Driveway #4. The remaining intersections can operate at an acceptable LOS under stop sign-control. It should be noted that Driveway #5 will have to be configured for right-in/right-out operation only on both sides of Pennsylvania Avenue, given the distance to the intersection at SR 12/Pennsylvania Avenue. The necessary configuration of each driveway is detailed in Chapters 6 and 7. With the necessary improvements, the project driveways will operate at an acceptable LOS, thereby providing sufficient access to and from the site.

Project Driveway Queuing

With the improvements detailed in Chapters 6 and 7, the queuing at the project driveways will be minimized. A majority of the trips associated with the project will be using Driveway #4, which is recommended to operate under traffic signal control.

Impact F-1: The project site plan provides an adequate internal roadway network, lacks dead-end drive aisles, and provides sufficient capacity internally. Additionally, the project driveways operate at acceptable levels, with the proposed changes identified in the intersection analysis. Given these considerations, it can be concluded that the project site plan provides generally acceptable on-site circulation and access. The project site plan does not address on-site traffic control and several of the internal driveways are spaced closer than 150 feet. Therefore, a significant traffic impact occurs.

Mitigation F-1: Revise the project site plan to indicate traffic control devices on the internal roadways. Concurrently, revise the project site plan to provide the necessary turn lanes at the major internal intersection, project driveways, and to provide at least 150 feet of separation between driveways along the internal roadway.

Impact After Mitigation: Less than significant

ON-SITE PARKING FOR VEHICLES

Significance Criteria

A significant impact occurs if the project fails to provide a sufficient quantity of on-site parking for vehicles

Project Impact

For purposes of this analysis, the adequacy of the parking supply is based on a comparison of the parking code requirements, taken from the City of Suisun City *Municipal Code* (Section 18.52.040), and the parking supply shown on the project site plan. Our analysis of on-site parking considers the commercial component of the project, since parking areas are not indicated in the residential sections of Planning Area #1, #2, or #3.

To evaluate the parking supply, we employed the following process:

1. Determine parking code requirements for each type of use
2. Calculate parking requirements for each category of use
3. Compare total parking requirements to parking supply

Parking Code Requirements

The City of Suisun City *Municipal Code* provides on-site parking requirements for a variety of uses. These categories include different types of residential uses, commercial uses, educational facilities, offices, and other types of buildings. For the commercial site, the following category would be applicable:

General commercial shopping centers- One off-street parking stall for each two hundred fifty square feet of gross floor area for all buildings and/or uses in the center (4 spaces per 1,000 square feet of building)

Since we lack detailed information regarding the type of uses within the site, we have assumed that the shopping center parking requirement would apply.

Parking Spaces Required

For Planning Area #1, the number of parking spaces required would range from 2,600 (Base Project) to 1,400 (Alternative 2). Alternative 1 would require 1,920 spaces.

Parking Requirements and Parking Supply

For Planning Area #1, the following number of spaces would be provided:

- Base Project: 3,343 spaces (2,600 spaces required)
- Alternative 1: 2,261 spaces (1,920 spaces required)
- Alternative 2: 1,771 spaces (1,400 spaces required)

In general, the project provides parking at a ratio of 5 spaces/1,000 square feet of building as opposed to the City's requirement of 4 spaces/1,000 square feet of building. Under all scenarios, the parking for Planning Area #1 is sufficient.

ON-SITE PARKING FOR BICYCLES

Significance Criteria

A significant impact occurs if the project fails to provide a sufficient quantity of on-site parking for bicycles

Project Impact

The City of Suisun City *Municipal Code*, section 18.52.040, contains the following requirement related to bicycle parking:

All commercial and office areas shall provide adequate locking facilities for bicycle parking at any location convenient to the facility for which they are designated. Whenever possible, weatherproofing or covering should be used.

The project site plan does not detail bicycle parking locations, as required above. Since these facilities are absent, then a significant impact occurs.

Impact F-2: The project site plan does not provide any bicycle parking facilities; therefore a significant impact occurs. This absence of bicycle parking facilities conflicts with the requirement of the Municipal Code identified above.

Mitigation F-2: Revise the project site plan to include bicycle parking facilities.

Impact After Mitigation: Less than significant

ON-SITE AND OFF-SITE PEDESTRIAN CONNECTIONS

Significance Criteria

A significant impact occurs if project fails to provide accessible and safe pedestrian connections between buildings and to adjacent streets and transit facilities.

Project Impact

The project site plan provides strip, which appears to be indicative of cross-walks, throughout the project site. These cross-walks are found at internal intersections as well as along the frontage of many of the buildings. Therefore, the project site plan provides adequate on-site pedestrian connections.

While the project site plan details on-site pedestrian connections, the site plan does not explicitly detail connections from the site to adjacent roadways, such as Pennsylvania Avenue. Given this lack of connections to this adjacent roadway, a significant impact occurs.

Impact F-3: The project site plan does not provide pedestrian connections to an adjacent street (Pennsylvania Avenue); therefore a significant traffic impact occurs.

Mitigation F-3: Revise the project site plan to indicate pedestrian connections to adjacent streets with a focus on Pennsylvania Avenue.

Impact After Mitigation: Less than significant

DELIVERY VEHICLE ACCESS AND CIRCULATION

Significance Criteria

A significant impact occurs if a project fails to provide adequate accessibility for service and delivery trucks on-site including access to truck loading areas.

Project Impact

The project site plan for the commercial center provides a high level of truck access. Trucks can access the commercial site through either Driveways #3 or #4, or through a designated delivery driveway, under the Base Project or Alternative 1. Under Alternative 2, trucks would likely enter the site through Driveway #3 or Driveways #4. Driveway #4 is anticipated to operate under traffic signal control, which should facilitate truck access to the site. Large trucks, in particular, will be able to access the site at this signalized location. Alternately, these trucks could enter the site via Driveway #3 in the Base Project or Alternative 1 since a majority of the trucks will likely access the site from SR 12. Trucks entering at Driveway #3 would either circulate throughout the site and exit the site at Driveway #4 or exit at Driveway #3.

The project site plan also provides a high level of delivery access to many of the buildings shown on the site plan. For example, the “big-box” retail buildings have delivery areas in the back which are accessible from either side of each building. These types of uses typically have dedicated loading docks and loading areas located in the back of the building, given the number and scale of deliveries received. The smaller buildings on the site lack these dedicated delivery areas. However, these types of uses, such as small shops, restaurants, and personal service firms, don’t require deliveries on the scale of a “big-box” retailer. Deliveries often occur in the form of a small panel truck (such as a UPS truck) and deliveries occur in limited numbers throughout the day.

The delivery vehicle access to the site as well as access to individual buildings within the site would appear to be adequate; therefore there is no significant impact according to this criterion.

ACCESS MANAGEMENT STANDARDS

Significance Criteria

A significant impact occurs if a project violates access management standards (e.g. driveway spacing, signal spacing, sight distance, etc.) in a way that causes an adverse effect on the environment or reduction in public safety.

Project Impact

Intersection Spacing

As stated previously, the City of Suisun City lacks formal driveway and intersection spacing guidelines. In the absence of formal City guidelines, standard engineering practice and Caltrans guidelines will be applied.

Intersection Spacing- The *Highway Design Manual* provides some general guidelines regarding the spacing of intersections but does not provide formal standards. For purposes of this analysis, we have used the stopping sight distance criteria documented in Table 201.1 to set the driveway interval. Stopping sight distance is the minimum length that a driver needs to bring a vehicle to a complete stop when traveling at a certain speed. Based on the information provided by Table 201.1, the minimum stopping sight distance for a travel speed of 35 miles per hour is approximately 300 feet

If sufficient stopping sight distance is provided, then a vehicle traveling through an intersection would have sufficient distance to decelerate and stop if a driver exiting a driveway were to pull out in front of them. For example, we would want to make sure that a driver turning from SR 12 onto Pennsylvania Avenue has sufficient time and distance to stop should another driver exit the a driveway in front of them. Our review of the project site plan indicates that all of the intersections are spaced 300 feet or more from the adjacent intersections. The intersection spacing is therefore sufficient and the project impact is less than significant.

Project Driveway Sight Distance- Our review of the project driveways also considers sight distance at the driveways. Driveway sight distance ensures that vehicles exiting the project site have an unobstructed view of oncoming traffic. We applied a more restrictive sight distance standard, corner sight distance, to determine whether there is sufficient sight distance at the project driveways. This standard is provided by Table 405.1A in the *Design Manual*. According to this table, 500 feet of sight distance should be provided at the project driveways.

Our review of the project site plan and subsequent visits to the project site indicates that there is generally good visibility from the proposed driveway locations in all directions, under the existing conditions since the site is currently vacant. There is a potential for signs and landscaping associated with the project to obstruct visibility at the project driveways.

It will be essential that there is limited signage and landscaping adjacent to the project driveways. While signage and landscaping would be allowed, there must be a clear space from approximately 3 feet to 8 feet, which corresponds to the viewing area of a driver in most cars found on the roadways today. The project site plan does not indicate whether there will be restrictions on landscaping and signage adjacent to the driveways. Therefore, a significant traffic impact occurs.

Impact F-4: Signage and landscaping adjacent to the project site could obstruct sight distance at the project driveways.

Mitigation F-4: Revise project site plan to indicate any applicable restrictions on visually obstructive signage and landscaping at driveway locations.

Impact After Mitigation: Less than significant