## 2.6 EXISTING PLUS APPROVED PROJECTS TRAFFIC CONDITIONS

This section evaluates traffic operation impacts of approved but not yet completed development projects within the City of El Cerrito. The City identified the Target store located on MacDonald Avenue at Interstate 80 in the City of Richmond as an approved project to be considered as part of this analysis. The store is expected to be constructed before the proposed Mayfair Block project is built out.

### EXISTING PLUS APPROVED PROJECT CONDITION TRAFFIC VOLUMES

The traffic generated by the approved development project was added to the Existing Conditions traffic volumes. Trips generated and trip distribution patterns were obtained from the Traffic Impact Analysis report prepared by Farhad and Associated, dated December, 2003.

### PLANNED ROADWAY IMPROVEMENTS

In general, the analysis of Existing plus Approved Projects condition assumed the continued use of the existing roadway network, study intersections, intersection geometrics, and intersection traffic control as there are no planned roadway improvements for the Existing plus Approved Projects Conditions.

### EXISTING PLUS APPROVED PROJECTS CONDITIONS INTERSECTION LEVEL OF SERVICE

Table 4 displays the calculated Existing plus Approved Projects Conditions AM and PM peak hour levels of service for the sixteen study intersections. Detailed intersection LOS calculations for the Existing plus Approved Projects Conditions are contained in the Appendix.

**TABLE 4 – INTERSECTION LEVEL OF SERVICE – EXISTING PLUS APPROVED PROJECTS**

| INTERSECTION | | CONTROL TYPE | PEAK HOUR | EXISTING + APPROVED | |
|---|---|---|---|---|---|
| | | | | LOS | DELAY |
| 1 | San Pablo Avenue / Wall Avenue | Two-Way Stop Controlled | AM | ***F*** | ***> 80.0*** |
| | | | PM | ***F*** | ***> 80.0*** |
| 2 | San Pablo Avenue / Knott Avenue | Signal | AM | B | 17.4 |
| | | | PM | C | 23.0 |
| 3 | Kearney Street / Knott Avenue | Two-Way Stop Controlled | AM | *B* | *10.4* |
| | | | PM | *B* | *11.1* |
| 4 | Key Boulevard / Knott Avenue | All-Way Stop Controlled | AM | *B* | *11.0* |
| | | | PM | *B* | *11.9* |
| 5 | I-80 WB Off-Ramp / Cutting Boulevard | Signal | AM | C | 23.3 |
| | | | PM | B | 15.4 |
| 6 | I-80 Carpool Ramps / Cutting Boulevard | Signal | AM | C | 34.9 |
| | | | PM | D | 36.9 |
| 7 | San Pablo Avenue / Cutting Boulevard | Signal | AM | **F** | **> 80.0** |
| | | | PM | **F** | **> 80.0** |
| 8 | Kearney Street / Cutting Boulevard | Two-Way Stop Controlled | AM | *A* | *9.2* |
| | | | PM | *A* | *9.8* |
| 9 | Key Boulevard / Cutting Boulevard | All-Way Stop Controlled | AM | *B* | *14.1* |
| | | | PM | *B* | *14.4* |
| 10 | Junction Avenue / Cutting Boulevard | One-Way Stop Controlled | AM | *A* | *10.0* |
| | | | PM | *A* | *9.0* |
| 11 | Key Boulevard / Liberty Street | One-Way Stop Controlled | AM | *B* | *13.1* |
| | | | PM | *B* | *12.2* |
| 12 | Elm Street / Hill Street | Signal | AM | D | 53.0 |
| | | | PM | **F** | **> 80.0** |
| 13 | San Pablo Avenue / Eastshore Avenue | Signal | AM | D | 52.9 |
| | | | PM | D | 51.5 |
| 14A | 55th Street / Potrero Avenue | One-Way Stop Controlled | AM | *C* | *15.3* |
| | | | PM | *C* | *17.5* |
| 14B | I-80 WB On-Ramp / Potrero Avenue | Uncontrolled | AM | *B* | *14.3* |
| | | | PM | *B* | *11.8* |
| 15 | Eastshore Boulevard / Potrero Avenue | Signal | AM | B | 19.4 |
| | | | PM | B | 18.5 |
| 16 | San Pablo Avenue / Potrero Avenue | Signal | AM | C | 29.5 |
| | | | PM | C | 25.7 |

Source: Korve Engineering – March 2006.
Notes:
Delay in seconds per vehicle.

As illustrated in Table 4, all of the sixteen study intersections are expected to operate at LOS D or better during the AM and PM peak hours under the Existing plus Approved Projects Condition except the following intersections:

Intersection Number

1. San Pablo Avenue / Wall Avenue: LOS F in both the AM and PM peak hours;
7. San Pablo Avenue / Cutting Boulevard: LOS F in both the AM and PM peak hours; and
12. Elm Street / Hill Street: LOS F in the PM peak hour.

# 3.0 TRAFFIC IMPACT ANALYSIS

This section discusses the near term impacts of the proposed project under the Existing Conditions and Exiting plus Approved Projects Conditions. Project impacts to the roadway intersections, bicycle and pedestrian facilities, transit services, project site access and circulation, and parking are also discussed.

## 3.1 PROJECT DESCRIPTION

The proposed project consists of 60 residential townhouse units and 11,000 square feet of ground floor retail space with two enclosed garage spaces per residential unit for a total of 88 covered spaces for residents. The project proposes to add eight street parking spots along San Pablo Avenue. This additional parking on San Pablo Avenue is intended to serve the retail facilities. The on-street parking will require the removal of the easternmost lane in the northbound direction along San Pablo Avenue just north of Cutting Boulevard. San Pablo Avenue would narrow from three lanes to two lanes approximately 160 feet north of Cutting Boulevard via a merge movement. Because San Pablo Avenue already narrows from three lanes to two lanes north of Knott Avenue, the proposed changes are not expected to have significant impacts on traffic.

On the west side of the project, the proposal would replace 20 parallel parking spaces with 90 degree parking along Kearney Street. The changes will add 19 new spaces, bringing the total amount of parking spaces on Kearney Street from 20 to 39. These spaces would be dedicated to the retail uses.

Access to the proposed project would be provided by two driveways, one located on the north side (Knott Avenue) and one located on the south side (Cutting Boulevard) of the project site. An internal driveway that is 24 feet wide and runs the length of the building provides access to resident garages as well as two trash rooms and services.

## 3.2 TRIP GENERATION

The number of vehicle trips that would be generated by the proposed project was estimated through a trip generation analysis. Trip generation rates and inbound/ outbound splits for the land uses under consideration were taken from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, Seventh Edition. ITE rates reflect vehicle trip generation for land uses in suburban communities where auto is the only significant mode of travel.

Since the proposed project is located adjacent to the El Cerrito del Norte BART station, an analysis of the 2000 U.S. Census Bureau data for the means of transportation to work of project area residents was conducted to derive the percentage of transit users. The analysis found an approximate 75% and 25% split of motorists and transit users; therefore, a 25% trip credit was applied the ITE rate to account for transit trips that would occur on BART or the bus routes that serve the BART station. Table 5 summarizes the vehicle trip generation characteristics of the proposed project.

**TABLE 5 – PROJECT TRIP GENERATION**

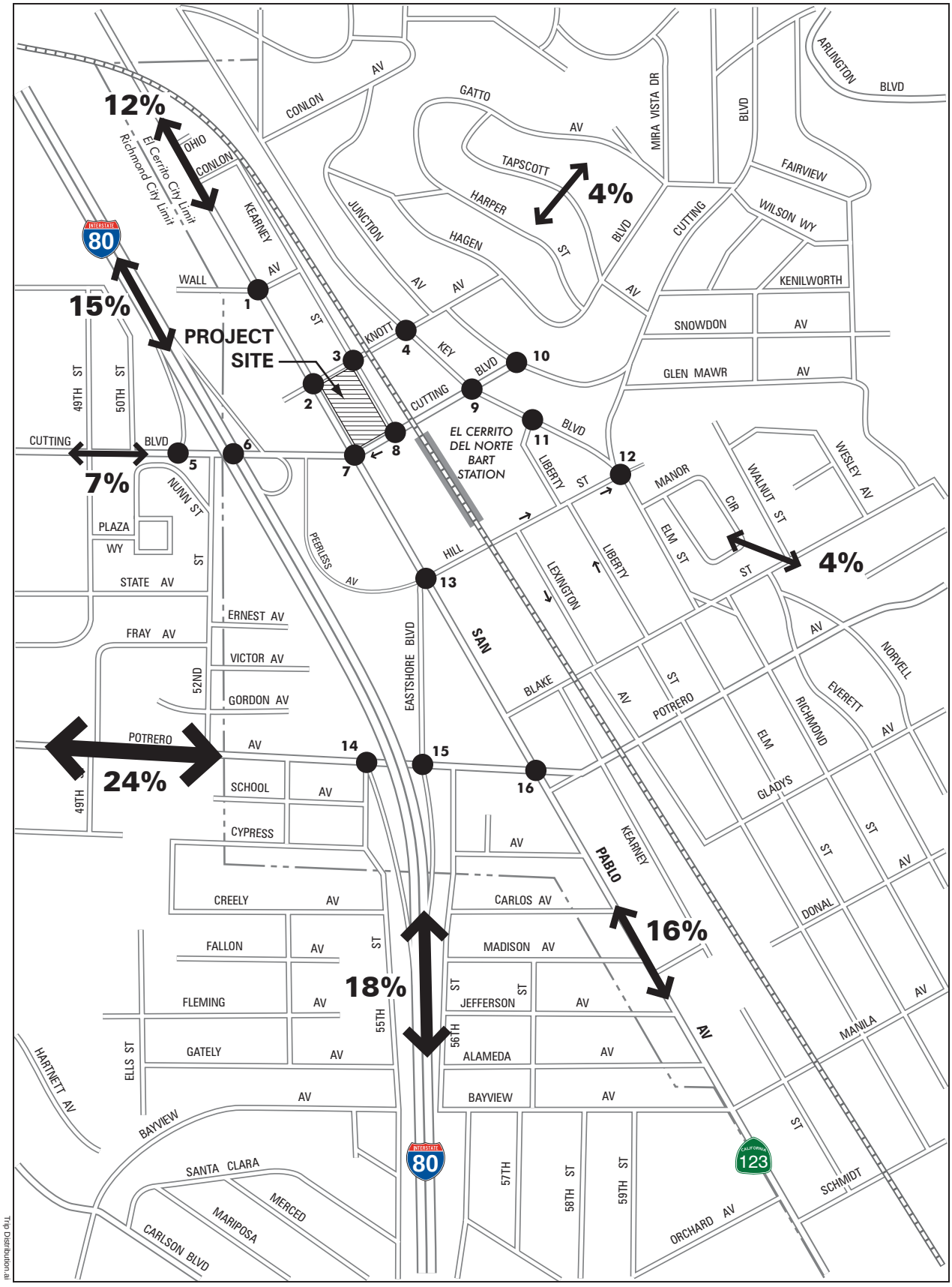
| Land Use | Size | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|
| | | In | Out | Total | In | Out | Total |
| Residential [1] | 60 units | 4 | 22 | 26 | 21 | 10 | 31 |
| Retail [2] | 11,000 s.f. | 0 | 0 | 0 | 13 | 17 | 30 |
| **Subtotal** | | **4** | **22** | **26** | **34** | **27** | **61** |
| 25% Transit Credit [3] | | 1 | 5 | 6 | 8 | 7 | 15 |
| **Total** | | **3** | **17** | **20** | **26** | **20** | **46** |

Source: Korve Engineering – March 2006, ITE Trip Generation Manual, Seventh Edition.
[1] Residential Condominium / Townhouse (Land Use Code 230)
[2] Specialty Retail Center (Land Use Code 232)
[3] Transit credit determined from US Census "Journey to Work" data for the 94530 zip code

## 3.3 TRIP DISTRIBUTION

The distribution of project traffic was determined based on a select link analysis performed with the base year CCTA Countywide model. The inbound and outbound trip total was determined on the nearest link at the location of the proposed project in the model. Regional cross sections at major arterials were identified, resulting in the selection of northbound and southbound San Pablo Avenue, westbound Cutting Boulevard, westbound Potrero Avenue, and both the northbound and southbound directions of I-80. Trips heading east into El Cerrito Hills were also selected for evaluation. The total number of trips both originating and terminating in each of these directions was determined. The percentage of these trips relative to the total trips on the nearest link was determined to be the trip distribution for this project. Figure 7 summarizes the assignment used to distribute project generated vehicle trips.

Korve Engineering




Trip Distribution.ai

MAYFAIR BLOCK TRAFFIC STUDY

**Figure 7**

## PROJECT TRIP DISTRIBUTION

## 3.4 STANDARDS OF SIGNIFICANCE

A project would normally have a significant effect on the environment if it would cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., results in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads or delays at intersections), or change the condition of an existing street (i.e., street closures, changing direction of travel) in a manner that would substantially affect access or traffic load and capacity of the street system. The specific criteria utilized for this analysis are as follows:

**INTERSECTION LEVEL OF SERVICE CRITERIA:** A project-related or cumulative traffic impact is considered to be significant if the proposed project:

- Causes the existing baseline level of service to degrade to worse than LOS D at any intersection; or
- Causes the volume to capacity ratio to increase by one or more percent for intersections already operating at unacceptable LOS E or LOS F under the no project conditions.

**PEDESTRIAN AND BICYCLE CRITERIA:** A pedestrian or bicycle impact is considered to be significant if the project:

- Results in potential conflicts for pedestrians or bicyclists;
- Fails to provide adequate bicycle and pedestrian access; or
- Exacerbates a current unsafe pedestrian or bicycle condition in the project area.

**TRANSIT IMPACT CRITERIA:** A transit impact is considered to be significant if the project:

- Causes the BART peak hour load factor to degrade to worse than 1.15; or
- Causes transit demand above the levels able to be adequately provided by local transit operators or agencies.

**SITE AND CIRCULATION IMPACT CRITERIA:** A site and circulation impact is considered to be significant if the project:

- Results in interference with traffic flow on public streets at site access driveways;
- Results in potential internal circulation conflicts for pedestrians or motorists;
- Results in insufficient or inadequate accessibility for delivery or service vehicles that would interfere with traffic flow; or
- Results in circulation patterns that are inconsistent with General Plan policies.

**PARKING IMPACT CRITERIA:** A parking impact is considered to be significant if the project:

- Results in projected parking demand that would exceed the proposed parking supply on a regular and frequent basis; or
- Results in an increased use of permanent neighborhood parking for area residents.

## 3.5 EXISTING PLUS PROJECT TRAFFIC CONDITIONS

The following presents the traffic operations and potential traffic impacts under the Existing plus Project Conditions at the sixteen study intersections. Intersections that would result in unacceptable LOS due to the proposed project are identified in accordance with the City of El Cerrito policy.

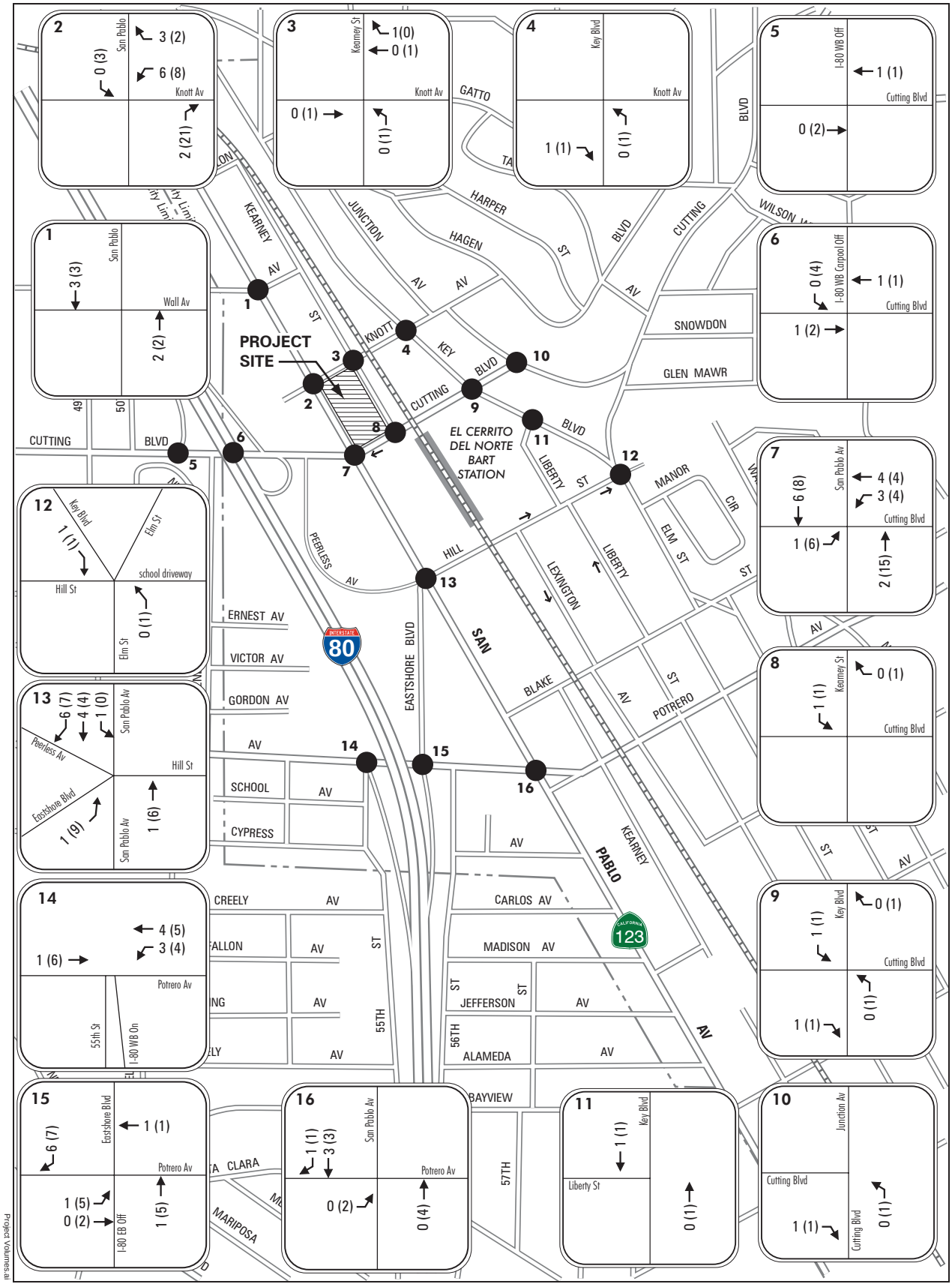
### EXISTING PLUS PROJECT CONDITION TRAFFIC VOLUMES

The traffic generated by the Mayfair Block project was added to the Existing Conditions traffic volumes based on the determined distribution percentages. Figure 8 displays the Existing plus Project Condition AM and PM peak hour turning movement volumes at the sixteen study intersections.

### EXISTING PLUS PROJECT CONDITION INTERSECTION LEVEL OF SERVICE

Table 6 presents a summary of LOS for the Existing and Existing plus Project Conditions AM and PM peak hour levels of service at the study intersections. Detailed intersection LOS calculations are contained in the Appendix.

Korve Engineering




MAYFAIR BLOCK TRAFFIC STUDY

**Figure 8**

# PROJECT TRAFFIC VOLUMES

## AM (PM) Peak Hour

**TABLE 6 – INTERSECTION LEVEL OF SERVICE – EXISTING PLUS PROJECT**

| | INTERSECTION | PEAK HOUR | EXISTING CONDITIONS | | EXISTING + PROJECT | |
|---|---|---|---|---|---|---|
| | | | LOS | DELAY | LOS | DELAY |
| 1 | San Pablo Avenue / Wall Avenue | AM | ***F*** | ***> 80.0*** | ***F*** | ***> 80.0*** |
| | | PM | ***F*** | ***> 80.0*** | ***F*** | ***> 80.0*** |
| 2 | San Pablo Avenue / Knott Avenue | AM | B | 17.0 | B | 17.0 |
| | | PM | C | 21.2 | C | 22.1 |
| 3 | Kearney Street / Knott Avenue | AM | *B* | *10.3* | *B* | *10.3* |
| | | PM | *B* | *10.9* | *B* | *10.9* |
| 4 | Key Boulevard / Knott Avenue | AM | *B* | *11.0* | *B* | *11.0* |
| | | PM | *B* | *11.6* | *B* | *11.7* |
| 5 | I-80 WB Off-Ramp / Cutting Boulevard | AM | C | 23.3 | C | 23.3 |
| | | PM | B | 15.4 | B | 15.4 |
| 6 | I-80 Carpool Ramps / Cutting Boulevard | AM | C | 34.9 | C | 34.8 |
| | | PM | D | 36.9 | D | 37.3 |
| 7 | San Pablo Avenue / Cutting Boulevard | AM | **F** | **> 80.0** | **F** | **> 80.0** |
| | | PM | **F** | **> 80.0** | **F** | **> 80.0** |
| 8 | Kearney Street / Cutting Boulevard | AM | *A* | *9.2* | *A* | *9.2* |
| | | PM | *A* | *9.7* | *A* | *9.7* |
| 9 | Key Boulevard / Cutting Boulevard | AM | *B* | *14.0* | *B* | *14.1* |
| | | PM | *B* | *14.2* | *B* | *14.3* |
| 10 | Junction Avenue / Cutting Boulevard | AM | *A* | *10.0* | *A* | *10.0* |
| | | PM | *A* | *9.0* | *A* | *9.5* |
| 11 | Key Boulevard / Liberty Street | AM | *B* | *13.1* | *B* | *13.1* |
| | | PM | *B* | *12.2* | *B* | *12.2* |
| 12 | Elm Street / Hill Street | AM | D | 53.0 | D | 53.0 |
| | | PM | **F** | **> 80.0** | **F** | **> 80.0** |
| 13 | San Pablo Avenue / Eastshore Avenue | AM | D | 49.4 | D | 50.1 |
| | | PM | D | 50.7 | D | 51.9 |
| 14A | 55th Street / Potrero Avenue | AM | *C* | *15.2* | *C* | *15.3* |
| | | PM | *C* | *16.9* | *C* | *17.2* |
| 14B | I-80 WB On-Ramp / Potrero Avenue | AM | *B* | *14.2* | *B* | *14.3* |
| | | PM | *B* | *11.3* | *B* | *11.4* |
| 15 | Eastshore Boulevard / Potrero Avenue | AM | B | 19.2 | B | 19.2 |
| | | PM | B | 17.3 | B | 17.7 |
| 16 | San Pablo Avenue / Potrero Avenue | AM | C | 29.5 | C | 29.4 |
| | | PM | C | 25.6 | C | 25.6 |

Source: Korve Engineering – March 2006.
Notes:
Delay in seconds per vehicle.

As illustrated in Table 6, all of the sixteen study intersections are expected to operate at LOS D or better during the AM and PM peak hours under the Existing plus Project Condition except the following intersections:

Intersection Number

1. San Pablo Avenue / Wall Avenue: LOS F in both the AM and PM peak hours;
7. San Pablo Avenue / Cutting Boulevard: LOS F in both the AM and PM peak hours; and
12. Elm Street / Hill Street: LOS F in the PM peak hour.

## 3.6 EXISTING PLUS APPROVED PLUS PROJECT TRAFFIC CONDITIONS

The following presents the traffic operations and potential traffic impacts under the Existing plus Approved Projects plus Project Conditions at the sixteen study intersections. Intersections that would result in unacceptable LOS due to the proposed project are identified in accordance with the City of El Cerrito policy.

### EXISTING PLUS APPROVED PROJECTS PLUS PROJECT CONDITION TRAFFIC VOLUMES

The traffic generated by the Mayfair Block project was added to the Existing plus Approved Projects traffic volumes based on the determined distribution percentages.

### EXISTING PLUS APPROVED PLUS PROJECT CONDITION INTERSECTION LEVEL OF SERVICE

Table 7 presents a summary of LOS for the Existing and Existing plus Approved Projects plus Project Conditions AM and PM peak hour levels of service at the study intersections. Detailed intersection LOS calculations for are contained in the Appendix.

**TABLE 7 – INTERSECTION LEVEL OF SERVICE – EXISTING PLUS APPROVED PROJECTS PLUS PROJECT**

| INTERSECTION | | CONTROL TYPE | PEAK HOUR | EXISTING + APPROVED | | EXISTING + APPROVED + PROJECT | |
|---|---|---|---|---|---|---|---|
| | | | | LOS | DELAY | LOS | DELAY |
| 1 | San Pablo Avenue / Wall Avenue | Two-Way Stop Controlled | AM | ***F*** | ***> 80.0*** | ***F*** | ***> 80.0*** |
| | | | PM | ***F*** | ***> 80.0*** | ***F*** | ***> 80.0*** |
| 2 | San Pablo Avenue / Knott Avenue | Signal | AM | B | 17.4 | B | 17.4 |
| | | | PM | C | 23.0 | C | 23.0 |
| 3 | Kearney Street / Knott Avenue | Two-Way Stop Controlled | AM | *B* | *10.4* | *B* | *10.4* |
| | | | PM | *B* | *11.1* | *B* | *11.1* |
| 4 | Key Boulevard / Knott Avenue | All-Way Stop Controlled | AM | *B* | *11.0* | *B* | *11.0* |
| | | | PM | *B* | *11.9* | *B* | *11.9* |
| 5 | I-80 WB Off-Ramp / Cutting Boulevard | Signal | AM | C | 23.3 | C | 23.3 |
| | | | PM | B | 15.4 | B | 15.4 |
| 6 | I-80 Carpool Ramps / Cutting Boulevard | Signal | AM | C | 34.9 | C | 34.8 |
| | | | PM | D | 36.9 | D | 37.3 |
| 7 | San Pablo Avenue / Cutting Boulevard | Signal | AM | **F** | **> 80.0** | **F** | **> 80.0** |
| | | | PM | **F** | **> 80.0** | **F** | **> 80.0** |
| 8 | Kearney Street / Cutting Boulevard | Two-Way Stop Controlled | AM | *A* | *9.2* | *A* | *9.2* |
| | | | PM | *A* | *9.8* | *A* | *9.8* |
| 9 | Key Boulevard / Cutting Boulevard | All-Way Stop Controlled | AM | *B* | *14.1* | *B* | *14.1* |
| | | | PM | *B* | *14.4* | *B* | *14.5* |
| 10 | Junction Avenue / Cutting Boulevard | One-Way Stop Controlled | AM | *A* | *10.0* | *A* | *10.0* |
| | | | PM | *A* | *9.0* | *A* | *9.5* |
| 11 | Key Boulevard / Liberty Street | One-Way Stop Controlled | AM | *B* | *13.1* | *B* | *13.1* |
| | | | PM | *B* | *12.2* | *B* | *12.2* |
| 12 | Elm Street / Hill Street | Signal | AM | D | 53.0 | D | 53.0 |
| | | | PM | **F** | **> 80.0** | **F** | **> 80.0** |
| 13 | San Pablo Avenue / Eastshore Avenue | Signal | AM | D | 52.9 | D | 53.9 |
| | | | PM | D | 51.5 | D | 52.9 |
| 14A | 55th Street / Potrero Avenue | One-Way Stop Controlled | AM | *C* | *15.3* | *C* | *15.4* |
| | | | PM | *C* | *17.5* | *C* | *17.7* |
| 14B | I-80 WB On-Ramp / Potrero Avenue | Uncontrolled | AM | *B* | *14.3* | *B* | *14.4* |
| | | | PM | *B* | *11.8* | *B* | *11.9* |
| 15 | Eastshore Boulevard / Potrero Avenue | Signal | AM | B | 19.4 | B | 19.4 |
| | | | PM | B | 18.5 | B | 19.1 |
| 16 | San Pablo Avenue / Potrero Avenue | Signal | AM | C | 29.5 | C | 29.5 |
| | | | PM | C | 25.7 | C | 25.7 |

Source: Korve Engineering – March 2006.
Notes: Delay in seconds per vehicle.

As illustrated in Table 7, all of the sixteen study intersections are expected to operate at LOS D or better during the AM and PM peak hours under the Existing plus Approved Projects plus Project Condition except the following intersections:

Intersection Number

1. San Pablo Avenue / Wall Avenue: LOS F in both the AM and PM peak hours;
7. San Pablo Avenue / Cutting Boulevard: LOS F in both the AM and PM peak hours; and
12. Elm Street / Hill Street: LOS F in the PM peak hour.

## 3.7 PEDESTRIAN/BICYCLE FACILITY IMPACTS

The project would add a small amount of pedestrian and bicycle traffic to the area's circulation network. However, this addition would not result in the exceedance of available capacities on these pedestrian and bicycle facilities.

As part of the project, sidewalks would be constructed along the Knott Avenue, San Pablo Avenue, Kearny Street and Cutting Boulevard frontages. The project proposes no features which would be unsafe to pedestrian or bicycle travel. As illustrated in Figure 5, pedestrian traffic originating from the project site would be able to safely and legally cross Knott Avenue and Cutting Boulevard at crosswalks at both San Pablo Avenue and the Ohlone Greenway. Project pedestrians would be able to safely and efficiently cross San Pablo Avenue at the Knott Avenue and Cutting Boulevard signalized intersections. The inefficiencies which affect pedestrian travel across San Pablo Avenue to and from the BART station would not hinder project pedestrian traffic as the crosswalks of San Pablo Avenue at the Knott Avenue and Cutting Boulevard signalized intersections are on the legs closest to the project site.

Therefore, there would be no significant adverse impacts on pedestrian and bicycle activity as a result of this project.

## 3.8 TRANSIT IMPACTS

The project would add a small amount of transit riders to the area's BART and bus services. This analysis was based an approximate 75% and 25% split of motorists and transit users; therefore, the project is expected to generate 5 total transit trips (1 inbound / 4 outbound) in the AM and 10 total transit trips (5 inbound/ outbound) in the PM peak hours. The trips are assumed to be spread evenly across all available transit routes serving the regional transportation hub at the El Cerrito del Norte BART station. This addition would be negligible due to the wide range of available transit options, and would not result in the exceedance of available capacities.

Therefore, there would be no significant adverse impact to the area transit service as a result of the project.

## 3.9 SITE ACCESS/CIRCULATION IMPACTS

The project provides adequate site access and on-site circulation. The project traffic volumes into and out of each driveway would allow each to operate with adequate levels of service. The project also provides adequate emergency and service vehicle access as well as sufficient width for vehicle maneuvers in and out of garages.

The internal project driveway is a two-way traffic, 24-foot wide lane that runs the length of the building providing access to two trash rooms and resident garages. Although the lane provides sufficient width for vehicle maneuvers in and out of garages, a potential circulation conflict may arise when residents move the inner car out of the garage (i.e. residents must move two vehicles at the same time - parking one in the lane while driving the other one out). Should this situation become problematic in the future, the internal driveway can readily be designated as a one-way traffic lane with entrance on Knott Avenue and exit on Cutting Boulevard. In this way, potential internal circulation conflicts would be eliminated.

Therefore, there would be no significant adverse access or circulation impacts as a result of the proposed project.

## 3.10 PARKING IMPACTS

The project proposes two covered spaces per residential unit and additional spaces for retail patrons. The City of El Cerrito requires at least two parking spaces per dwelling unit for townhouses of two or more bedrooms, with at least one space located in a garage or covered structure. The project therefore proposes to supply enough parking for the residential component to meet City requirements.

The project will provide 88 covered spaces for residents in two enclosed garages. This will result in a six space deficiency as the City of El Cerrito requires 94 on-site parking spaces for the residential component of the project. However, there will be street parking spaces on San Pablo Avenue to the west, and Kearney Street to the east.

Eight new spaces will be available on San Pablo Avenue, while the existing parking on Kearney Street will be expanded from 20 spaces to 39 spaces. The additional spaces on Kearney Street will be made available by converting parallel parking to 90 degree parking for the entire stretch of the block. These on-street parking facilities would be metered for short term use and would help to serve the project's proposed retail uses.

According to *ITE Parking Generation Manual, Third Edition*, approximately 0.98 spaces per residential unit is needed to meet parking demand expected from a project similar to the proposed project. The project meets national demand rates for the residential component.

The City also requires one parking space per 300 square feet of retail area; therefore, the proposed project would require 37 parking spaces for the retail component to meet City standards.

According to *ITE Parking Generation Manual, Third Edition*, approximately 2.65 spaces per 1,000 square feet of retail space is needed to meet parking demand expected from a project similar to the proposed project. The proposed project would require 30 parking spaces to meet national demand rates for the retail component.

However, due to the proximity of the project to transit facilities at the El Cerrito del Norte BART station, it is reasonable to assume some of the retail patrons would be pedestrians, transit users and area residents that would require no parking. Furthermore, street parking is available on both sides of Kearney Street and Knott Avenue, and on the north side of Cutting Boulevard east of Kearney Street. A total of over 1,000 parking spaces are available within a one half mile radius of the project.

The project is also immediately adjacent to two BART station parking lots to the south and east sides with over 2,000 parking spaces. BART offers free parking for riders subject to a 24 hour limit on weekdays, and no restrictions on weekends and holidays.

Observations of parking supply in the project vicinity resulted in no indication of a shortage of parking spaces either on the adjacent streets or in the adjacent BART parking lots.

Therefore, there would be no significant parking impacts as a result of the proposed project.

# 4.0 CUMULATIVE CONDITIONS

This section describes the future year volume forecasts, and traffic conditions and potential impacts with the construction of the Mayfair Block project under the Cumulative (General Plan build out) Conditions in year 2025. A discussion of the future area design guidelines is also presented.

## 4.1 FUTURE YEAR PROJECTIONS

Cumulative Conditions traffic volumes were forecasted using the most recent version of the Contra Costa Transportation Authority's (CCTA) Countywide travel demand model. The Countywide Model is GIS-integrated, covering the entire Bay Area with a 2,700-zone land use database, and it has an extensive highway and transit simulation network. The Model uses the TransCAD® software to forecast hourly and daily traffic levels for the years 2000 through 2025.

The Countywide Model is updated every ten years and is maintained by CCTA. The City of El Cerrito uses the model to analyze the effects of new developments and changes in its General Plan, while CCTA and other agencies use the Countywide Model to analyze the effects on new transportation improvements.

To support the Countywide Model, CCTA maintains a database of current and proposed transportation projects -- the Comprehensive Transportation Project List. Local agencies provide CCTA with information on important local projects so that the database is kept up-to-date.

The model was calibrated and validated to Spring 2006 travel conditions within the City and has been tested through forecasting several future land use alternatives. Growth factors were calculated for each roadway segment and applied to existing intersection volumes to derive the Cumulative Conditions intersection volumes.

## 4.2 CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS

The following presents the traffic operations and potential traffic impacts under then Cumulative plus Project Conditions at the sixteen study intersections. Intersections that would result in unacceptable LOS due to Cumulative conditions are identified in accordance with the City of El Cerrito policy.

### PLANNED ROADWAY IMPROVEMENTS

In general, the analysis of Cumulative plus Project Condition assumed the continued use of the existing roadway network, study intersections, intersection geometrics, and intersection traffic control as there are no planned roadway improvements between the Existing and Cumulative conditions.

However, the General Plan identified following as needed improvements at the following intersections:

Intersection Number

9. Key Boulevard / Cutting Boulevard: Addition of a southbound right-turn lane on Key Boulevard; and

13. San Pablo Avenue / Eastshore Boulevard: Addition of an exclusive southbound right-turn lane on San Pablo Avenue to Eastshore Boulevard, an exclusive westbound left-turn lane on Hill Street to San Pablo Avenue, and a second exclusive eastbound left-turn lane from Eastshore Boulevard to San Pablo Avenue.

### CUMULATIVE PLUS PROJECT CONDITION INTERSECTION LEVEL OF SERVICE

Table 8 presents a summary of LOS for the Cumulative plus Project Conditions AM and PM peak hour levels of service at the study intersections. Detailed intersection LOS calculations for the Cumulative plus Project Conditions are contained in Appendix.

**TABLE 8 – INTERSECTION LEVEL OF SERVICE – CUMULATIVE + PROJECT**

| | INTERSECTION | CONTROL TYPE | PEAK HOUR | CUMULATIVE + PROJECT | |
|---|---|---|---|---|---|
| | | | | LOS | DELAY |
| 1 | San Pablo Avenue / Wall Avenue | Two-Way Stop Controlled | AM | ***F*** | ***> 80.0*** |
| | | | PM | ***F*** | ***> 80.0*** |
| 2 | San Pablo Avenue / Knott Avenue | Signal | AM | C | 22.1 |
| | | | PM | D | 36.9 |
| 3 | Kearney Street / Knott Avenue | Two-Way Stop Controlled | AM | *B* | *10.7* |
| | | | PM | *B* | *11.3* |
| 4 | Key Boulevard / Knott Avenue | All-Way Stop Controlled | AM | *C* | *15.3* |
| | | | PM | *B* | *14.0* |
| 5 | I-80 WB Off-Ramp / Cutting Boulevard | Signal | AM | D | 53.6 |
| | | | PM | C | 24.2 |
| 6 | I-80 Carpool Ramps / Cutting Boulevard | Signal | AM | **F** | **> 80.0** |
| | | | PM | **E** | **61.9** |
| 7 | San Pablo Avenue / Cutting Boulevard | Signal | AM | **F** | **> 80.0** |
| | | | PM | **F** | **> 80.0** |
| 8 | Kearney Street / Cutting Boulevard | Two-Way Stop Controlled | AM | *B* | *10.0* |
| | | | PM | *B* | *10.2* |
| 9 | Key Boulevard / Cutting Boulevard | All-Way Stop Controlled | AM | *D* | *30.4* |
| | | | PM | *C* | *20.8* |
| 10 | Junction Avenue / Cutting Boulevard | One-Way Stop Controlled | AM | *B* | *10.5* |
| | | | PM | *A* | *9.6* |
| 11 | Key Boulevard / Liberty Street | One-Way Stop Controlled | AM | *C* | *15.7* |
| | | | PM | *B* | *13.5* |
| 12 | Elm Street / Hill Street | Signal | AM | **E** | **71.9** |
| | | | PM | **F** | **> 80.0** |
| 13 | San Pablo Avenue / Eastshore Avenue | Signal | AM | E | 71.8 |
| | | | PM | E | 77.6 |
| 14A | 55th Street / Potrero Avenue | One-Way Stop Controlled | AM | *C* | *20.5* |
| | | | PM | *C* | *20.1* |
| 14B | I-80 WB On-Ramp / Potrero Avenue | Uncontrolled | AM | *C* | *16.1* |
| | | | PM | *B* | *12.4* |
| 15 | Eastshore Boulevard / Potrero Avenue | Signal | AM | D | 37.5 |
| | | | PM | C | 22.4 |
| 16 | San Pablo Avenue / Potrero Avenue | Signal | AM | D | 35.8 |
| | | | PM | C | 26.4 |

Source: Korve Engineering – March 2006.
Notes: Delay in seconds per vehicle.

As illustrated in Table 8, all of the sixteen study intersections are expected to operate at LOS D or better during the AM and PM peak hours under the Cumulative plus Project Condition except the following intersections:

Intersection Number

1. San Pablo Avenue / Wall Avenue: LOS F in both the AM and PM peak hours;
6. I-80 Carpool Ramps / Cutting Boulevard: LOS F and LOS E in the AM and PM peak hours, respectively;
7. San Pablo Avenue / Cutting Boulevard: LOS F in both the AM and PM peak hours; and
12. Elm Street / Hill Street: LOS E and LOS F in the AM and PM peak hour, respectively.
13. San Pablo Avenue / Eastshore Boulevard: LOS E in both the AM and PM peak hour.

## 4.3 PLANNING FOR FUTURE DEVELOPMENT IN THE DEL NORTE AREA

The City of El Cerrito General Plan Development Concept identifies an activity center or node adjacent to the El Cerrito del Norte BART station as a focus area for infill transit oriented development. In line with this goal of the General Plan, various visioning exercises have focused on a transit oriented village & transit hub as the development scenario at this BART station.

Key goals identified in the General Plan and other visioning documents include the following:

- Pedestrian-friendly block designs;
- Regional hub containing a mixture of land uses in close proximity, including
- employment, residential, retail, and civic uses;
- High density, high-quality buildings and structures within a short walk of the BART station that create a sense of community; and
- Coordinated transit systems including a variety of bus routes.

As part of this project, the applicant hired Calthorpe and Associates to do a conceptual master plan for the Del Norte Area. This conceptual plan looked at existing land use patterns and how the applicant's proposal will fit into the Del Norte area as a whole. This conceptual plan will not be considered for adoption, but rather can considered as a generalized starting point during ongoing development planning that may evolve into a more definitive approach if BART moves forward with the City toward potential master development of Del Norte.

With this conceptual Master Plan and possible future specific plans, the Del Norte Area could be transformed into a TOD community with increased land use density and a projected increase in transit ridership. Further analysis is required to evaluate environmental impacts, including the traffic impacts of build-out conditions, according to the conceptual Master Plan and subsequent planning documents.

The conceptual plan includes a suggestion to upgrade the I-80/Cutting Boulevard interchange to a full interchange. The traffic impacts resulting from this potential improvement to the I-80/Cutting Boulevard interchange should be analyzed in detail. Currently, drivers wanting to access southbound I-80 need to travel south on San Pablo Avenue and access the freeway via the existing on-ramp at Potrero Avenue. A new I-80/Cutting Boulevard interchange with southbound on-ramps to I-80 would enable project traffic and other area traffic to access all directions of I-80 at Cutting Boulevard. As a result, traffic volumes on San Pablo Avenue would decrease, as freeway-bound traffic would no longer need to travel along San Pablo Avenue to the Potrero Avenue on-ramp. A change in roadway capacity of this magnitude would have substantial affects on the local area circulation system as vehicles change paths to take advantage of new facilities. More detailed modeling and analysis would need to be undertaken at a later date to fully ascertain the precise benefits of such an improvement. In addition, new ramps on I-80 would require both Caltrans and FHWA discretionary approval. Issues that would be reviewed by those agencies include ramp and interchange spacing, weaving movements and merge/diverge service levels.

# 5.0 MITIGATION MEASURES

The following is a description of the intersections that would operate at unacceptable LOS according to City of El Cerrito LOS Standards in the analysis conditions. When significant impacts are identified, mitigation measures needed to reduce the impacts to less-than-significant levels are also described.

## 5.1 PROJECT IMPACTS

The Project does not contribute enough trips to warrant mitigation measures at any of the study intersections under the Existing plus Project or Existing plus Approved Projects plus Project conditions. All studied intersection volume-to-capacity ratio increases are less than the one-percent threshold of significance allowed by the City of El Cerrito LOS criteria.

## 5.2 CUMULATIVE IMPACTS

As described above, in the Cumulative plus Project condition, poor levels of service would occur at the following four intersections:

1. San Pablo Avenue / Wall Avenue: LOS F in both the AM and PM peak hour;
6. I-80 Carpool Ramps / Cutting Boulevard: LOS F and LOS E in the AM and PM peak hour, respectively;
7. San Pablo Avenue / Cutting Boulevard: LOS F in both the AM and PM peak hour;
12. Elm Street / Hill Street: LOS E and LOS F in the AM and PM peak hour, respectively; and

13. San Pablo Avenue / Eastshore Boulevard: LOS E in both the AM and PM peak hour.

While these intersections would function at LOS E or F in the Cumulative plus Project condition, the project would not contribute one or more percent to the volume to capacity ratio at any of these locations. Thus, the project's contribution to these Cumulative impacts would not be considered significant based on the City's established Level of Service criteria.