

**Appendix I**  
**Transportation Analysis**



# HEXAGON TRANSPORTATION CONSULTANTS, INC.



## 644 & 675 Piercy Road Industrial Building



### Transportation Analysis

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## Executive Summary

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This report presents the results of the transportation analysis conducted for a proposed industrial development located at 644-675 Piercy Road in San Jose, California. The project site is located within the Edenvale Area Development Policy (EADP) boundaries. The project would construct an industrial building with up to 225,000 square feet and associated vehicle parking and trailer parking on an approximately 15.92-acre vacant site. Access to the project site would be provided via Hellyer Avenue, Tennant Avenue, and Piercy Road.

This study was conducted for the purpose of identifying the potential transportation impacts related to the proposed industrial project. The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook* (April 2020). Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the *Transportation Analysis Handbook*, the project includes a California Environmental Quality Act (CEQA) level Transportation Analysis (TA) and a non-CEQA Local Transportation Analysis (LTA). The project would generate more than 100 new peak-hour vehicle trips, thus, a Congestion Management Program (CMP) traffic analysis based on the Santa Clara Valley Transportation Authority (VTA) *Transportation Impact Analysis (TIA) Guidelines* (2014) is required.

## CEQA Transportation Impact Analysis

### Project Vehicle Miles Traveled (VMT) Analysis

The project VMT estimated by the City's VMT Evaluation Tool is 14.80 VMT per worker, which exceeds the industrial threshold (existing regional average) of 14.37 VMT per worker. Since the VMT generated by the project would exceed the threshold of significance for industrial employment uses in the area, the project would result in a significant transportation impact on VMT, and mitigation measures are required to reduce the VMT impact to a less-than-significant level.

### Project Mitigation

Implementation of the following off-site multimodal infrastructure improvement (Tier 2 VMT reduction strategy) and Tier 4 TDM program would mitigate the significant VMT impact:

- **Traffic Calming Measure and Bike Access Improvement** – The project should narrow the existing roadway lane widths along Piercy Road and Tennant Avenue to implement Class IV protected bikeways with delineator bike buffers between Hellyer Avenue and Silicon Valley Boulevard/Basking Ridge Avenue.

Project will be required to install plastic bollard delineators along the following segments:



- Along both sides of Piercy Road from Hellyer Avenue to the start of the 550 Piercy Road project frontage.
- Along the east side of Piercy Road from the start of the 550 Piercy Road project frontage to Tennant Avenue.
- Along the south side of Tennant Avenue from Piercy Road to Hellyer Avenue-Basking Ridge Avenue.
- **Commute Trip Reduction Marketing and Education** – The project should implement a marketing campaign targeting all employees that encourages the use of shared rides and active modes of transportation. Marketing strategies may include new employee orientation on alternative commute options, event promotions, publications, and electronic (email) communications. The project should provide information and encouragement to use transit services, shared ride modes (i.e., carpooling), and active modes to reduce drive-alone commute trips and, thus, VMT. It is assumed that 100 percent of the project employees would participate in the commute trip reduction marketing and education program.

Based on the City's VMT Evaluation Tool, implementing the above recommended mitigation measures would lower the project VMT to 13.93 per worker, which would reduce the project impact to a less-than-significant level (below the industrial threshold of 14.37 VMT per worker).

### Cumulative VMT Impact Analysis

The proposed industrial project is consistent with the uses allowed within the *Industrial Park* (IP) land use designation and is consistent with the following City of San Jose Land Use Policies:

- Land Use Policy LU-6.4: Encourage the development of new industrial areas and the redevelopment of existing older or marginal industrial areas with new industrial uses, particularly in locations which facilitate efficient commute patterns.
- Land Use Policy LU-6.5: Maintain and create Light Industrial and Heavy Industrial designated sites that are at least one acre in size in order to facilitate viable industrial uses.
- Land Use Policy LU-7.1: Encourage industrial supplier/service business retention and expansion in appropriate areas in the City.

The proposed project is consistent with the Envision San Jose 2040 General Plan and would not require a General Plan Amendment (GPA). The construction of new industrial buildings would facilitate the development of an industrial site and would help retain industrial designated land within the City. Thus, the project would be considered part of the cumulative solution to meet the General Plan's long-range transportation goals and would result in a less-than-significant cumulative impact.

## Local Transportation Analysis

### Edenvale Area Development Policy Conformance

The project is required to be in conformance with the maximum allowable floor area ratio (FAR) for Edenvale Sub-Area 3 development, which is a maximum FAR of 0.40 for industrial development. The project would construct 225,000 square feet of building floor area on the 15.92-acre site, so the project FAR would be 0.32 and would be lower than the maximum allowable FAR of 0.40. Thus, the proposed project density is in conformance with the EADP.

## Project Trip Generation

After applying the Institute of Transportation Engineers (ITE) trip rates to the proposed project and applying the appropriate trip reductions, it is estimated that the project would generate 1,041 new daily trips, with 159 new trips (140 inbound and 19 outbound) occurring during the AM peak hour and 139 new trips (19 inbound and 120 outbound) occurring during the PM peak hour.

## Intersection Traffic Operations

The results of the intersection level of service evaluation show that all of the signalized study intersections are currently operating at acceptable levels of service during the AM and PM peak hours of traffic.

The project site is located in Edenvale Sub-Area 3, which means the site already has approval for industrial development as part of the EADP. Therefore, the project is not required to analyze any signalized intersections for potential adverse effects.

## Other Transportation Items

The proposed site plan shows adequate site access and on-site circulation for automobiles and trucks (including emergency vehicles), and no adverse traffic operational issues are expected to occur at the project driveways as a result of the project. The project would not have an adverse effect on the existing pedestrian or bicycle facilities in the study area. Hexagon has the following recommendations resulting from the evaluation of site access and pedestrian facilities.

## Recommendations

- Signage should be installed at the Tennant Avenue and Piercy Road driveways to indicate that access at the driveways is limited to employee vehicles only with no truck access.
- Pedestrian walkways/paths should be provided on site to connect the sidewalks along Hellyer Avenue and Piercy Road with building entrances.

# 1. Introduction

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This report presents the results of the transportation analysis conducted for a proposed industrial development located at 644-675 Piercy Road in San Jose, California (see Figure 1). The project site is located within the Edenvale Area Development Policy (EADP) boundaries. The project would construct an industrial building with up to 225,000 square feet (s.f.) and associated vehicle parking and trailer parking on an approximately 15.92-acre vacant site. Access to the project site would be provided via Hellyer Avenue, Tennant Avenue, and Piercy Road (see Figure 2).

This study was conducted for the purpose of identifying the potential transportation impacts related to the proposed industrial project. The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook* (April 2020). Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the *Transportation Analysis Handbook*, the project includes a California Environmental Quality Act (CEQA) level Transportation Analysis (TA) and a non-CEQA Local Transportation Analysis (LTA). The project would generate more than 100 new peak-hour vehicle trips, thus, a Congestion Management Program (CMP) traffic analysis based on the Santa Clara Valley Transportation Authority (VTA) *Transportation Impact Analysis (TIA) Guidelines* (2014) is required.

## CEQA Transportation Analysis Scope

The CEQA transportation analysis for the project consists of a project-level Vehicle Miles Traveled (VMT) impact analysis and a cumulative evaluation that demonstrates the project's consistency with the Envision San Jose 2040 General Plan.

## VMT Analysis Scope

The City of San Jose's Transportation Analysis Policy establishes procedures for determining project impacts on VMT based on project description, characteristics, and/or location. VMT is the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT measures the full distance of personal motorized vehicle trips with one end within the project. Typically, development projects that are farther from other, complementary land uses (such as a business park far from housing) and in areas without transit or active transportation infrastructure (bike lanes, sidewalks, etc.) generate more driving than developments near complementary land uses with more robust transportation options. Therefore, developments located in a central business district with high density and diversity of complementary land uses and frequent transit services are expected to internalize trips and generate shorter and fewer vehicle trips than developments located in a suburban area with low density of residential developments and no transit service in the project vicinity.

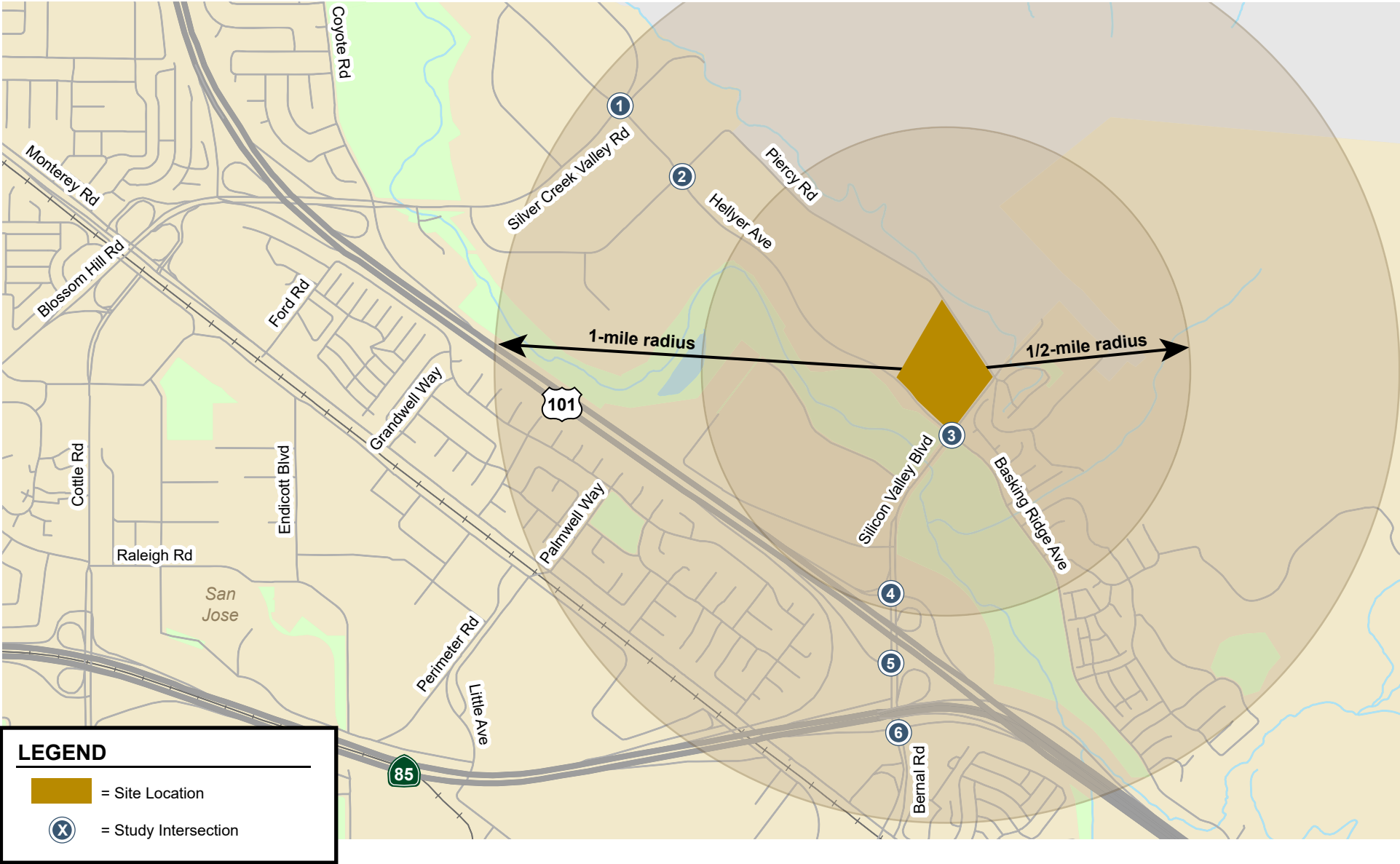


Figure 1  
Site Location and Study Intersections

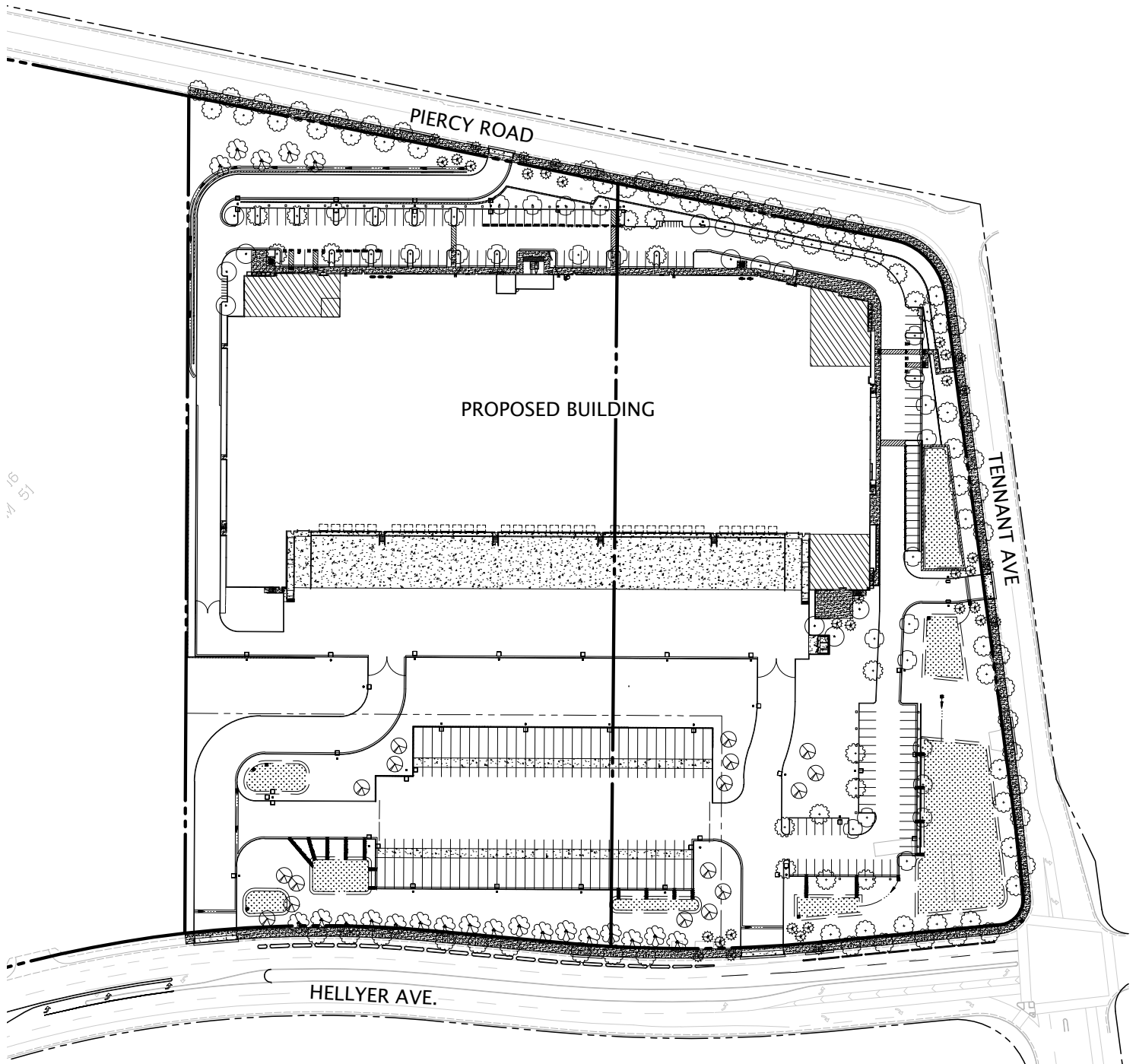


Figure 2  
Site Plan

A project's VMT is compared to the appropriate thresholds of significance based on the project location and type of development. When assessing a residential project, the project's VMT is divided by the number of residents expected to occupy the project to determine the VMT per capita. When assessing an office or industrial project, the project's VMT is divided by the number of employees to determine the VMT per employee. The thresholds of significance for development projects, as established in the Transportation Analysis Policy, are based on the existing citywide average VMT level for residential uses and the existing regional average VMT level for employment uses.

To identify whether a project would result in VMT impacts and whether the impacts can be mitigated, the City has created heat maps for residential and employment uses that show the current VMT per capita and per worker based on the locations of residences and jobs. Figure 3 shows the current VMT levels estimated by the City for industrial workers based on the locations of industrial jobs. Developments in the green-colored areas are estimated to have VMT levels that are below the thresholds of significance, while the orange- and pink-colored areas are estimated to have VMT levels that are above the thresholds of significance. Orange areas are deemed to be capable of being mitigated, whereas pink areas are considered incapable of being mitigated to a less-than-significant level. The project site is identified as being located in an orange area (mitigation possible).

To determine whether a project would result in CEQA transportation impacts related to VMT, the City has developed the San Jose VMT Evaluation Tool to streamline the analysis for residential, office, and industrial development projects. The VMT analysis approach is described under CEQA Transportation Analysis Methodology below.

## Cumulative Evaluation

Projects that require a CEQA transportation analysis must demonstrate consistency with the *Envision San José 2040 General Plan* to address cumulative impacts. Consistency with the City's General Plan is based on the project's density, design, and conformance to the General Plan goals and policies. If a project is consistent with the General Plan, it will be considered as part of the cumulative solution to meet the General Plan's long-range transportation goals, and therefore, will result in a less-than-significant cumulative impact. If a project is determined to be inconsistent with the General Plan, a cumulative impact analysis is required as part of the General Plan amendment to determine the project's cumulative effects.

### General Plan Policies Addressing VMT

The Circulation Element of the *Envision San José 2040 General Plan* includes a set of balanced, long-range, multi-modal transportation goals and policies that provide for a transportation network that is safe, efficient, and sustainable (minimizes environmental, financial, and neighborhood impacts). These transportation goals and policies are intended to improve multi-modal accessibility to all land uses and create a city where people are less reliant on driving to meet their daily needs. The *Envision San José 2040 General Plan* contains the following policies to encourage the use of non-automobile transportation modes to minimize vehicle trip generation and reduce VMT:

- Accommodate and encourage the use of non-automobile transportation modes to achieve San Jose's mobility goals and reduce vehicle trip generation and VMT (TR-1.1);
- Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects (TR-1.2);
- Increase substantially the proportion of commute travel using modes other than the single-occupant vehicle in order to meet the City's mode split targets for San Jose residents and workers (TR-1.3);



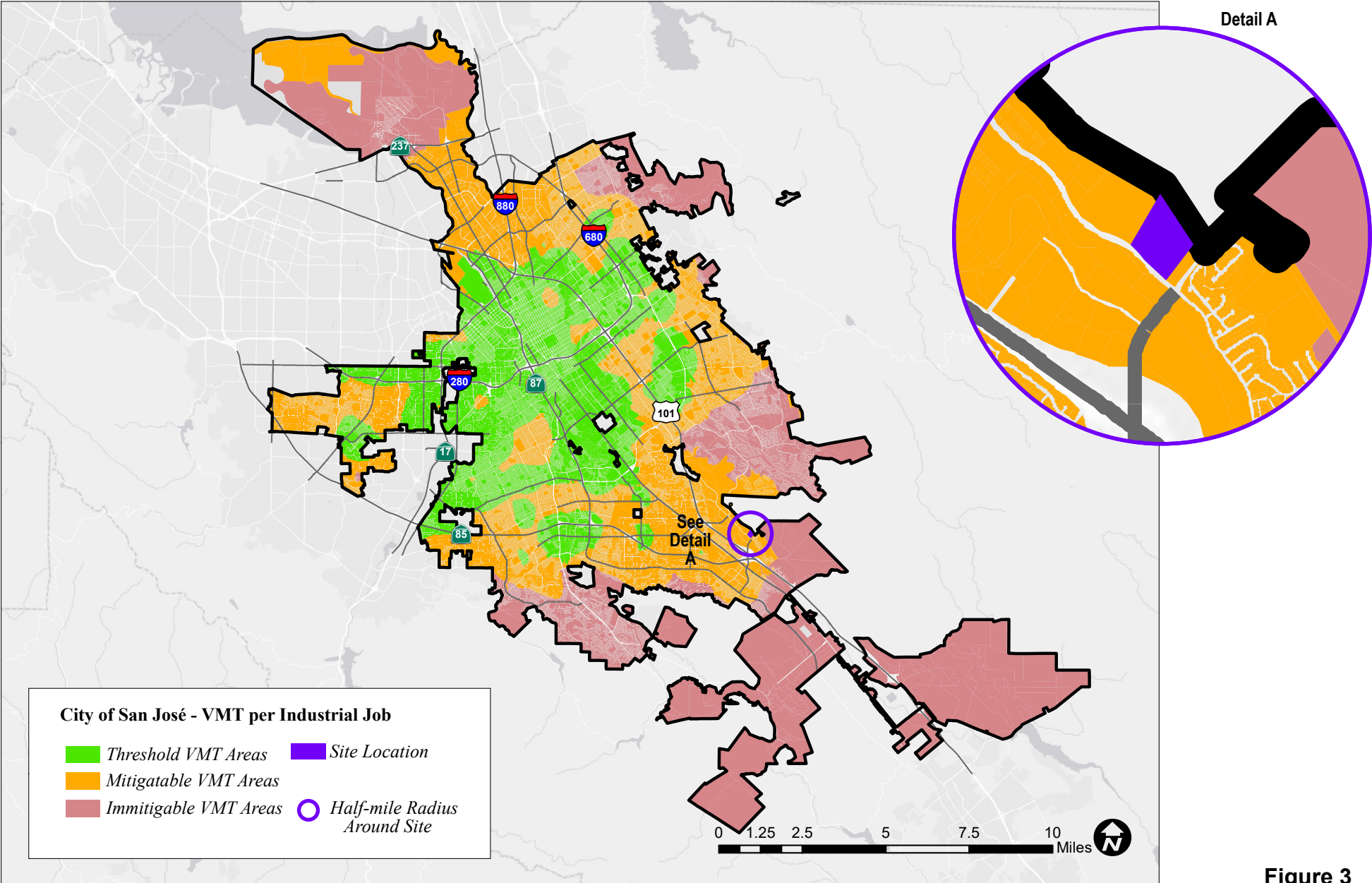


Figure 3  
VMT per Industrial Job Heat Map in San Jose

- Through the entitlement process for new development, projects shall be required to fund or construct needed transportation improvements for all transportation modes, giving first consideration to improvement of bicycling, walking and transit facilities and services that encourage reduced vehicle travel demand (TR-1.4);
- Actively coordinate with regional transportation, land use planning, and transit agencies to develop a transportation network with complementary land uses that encourage travel by bicycling, walking and transit, and ensure that regional greenhouse gas emissions standards are met (TR-1.8);
- Coordinate the planning and implementation of citywide bicycle and pedestrian facilities and supporting infrastructure. Give priority to bicycle and pedestrian safety and access improvements at street crossings and near areas with higher pedestrian concentrations (school, transit, shopping, hospital, and mixed-use areas) (TR-2.1);
- Provide a continuous pedestrian and bicycle system to enhance connectivity throughout the City by completing missing segments. Eliminate or minimize physical obstacles and barriers that impede pedestrian and bicycle movement on City streets. Include consideration of grade-separated crossings at railroad tracks and freeways. Provide safe bicycle and pedestrian connections to all facilities regularly accessed by the public, including the Mineta San Jose International Airport (TR-2.2);
- Integrate the financing, design and construction of pedestrian and bicycle facilities with street projects. Build pedestrian and bicycle improvements at the same time as improvements for vehicular circulation (TR-2.5);
- Require new development where feasible to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share in the cost of improvements (TR-2.8);
- As part of the development review process, require that new development along existing and planned transit facilities consist of land use and development types and intensities that contribute towards transit ridership, and require that new development is designed to accommodate and provide direct access to transit facilities (TR-3.3);
- Support the development of amenities and land use and development types and intensities that increase daily ridership on the VTA, BART, Caltrain, ACE and Amtrak California systems and provide positive fiscal, economic, and environmental benefits to the community (TR-4.1);
- Balance business viability and land resources by maintaining an adequate supply of parking to serve demand while avoiding excessive parking supply that encourages automobile use (TR-8.2);
- Support using parking supply limitations and pricing as strategies to encourage the use of non-automobile modes (TR-8.3);
- Discourage, as part of the entitlement process, the provision of parking spaces significantly above the number of spaces required by code for a given use (TR-8.4);
- Within new development, create and maintain a pedestrian-friendly environment by connecting the internal components with safe, convenient, accessible, and pleasant pedestrian facilities and by requiring pedestrian connections between building entrances, other site features, and adjacent public streets (CD-3.3);



- Create a pedestrian-friendly environment by connecting new residential development with safe, convenient, accessible, and pleasant pedestrian facilities. Provide such connections between new development, its adjoining neighborhood, transit access points, schools, parks, and nearby commercial areas (LU-9.1);
- Facilitate the development of housing close to jobs to provide residents with the opportunity to live and work in the same community (LU-10.5).

## CEQA Transportation Analysis Methodology

### Screening Criteria for VMT Analysis Exemption

The City of San Jose's *Transportation Analysis Handbook, 2020* includes screening criteria for projects that are expected to result in a less-than-significant VMT impact based on the project description, characteristics and/or location. The screening criterion set forth in the *Transportation Analysis Handbook* for small infill industrial projects is described below.

- 30,000 square feet of total gross floor area or less

The project is proposing to construct an industrial building with up to 225,000 square feet. Therefore, the project does not meet the screening criterion for small infill industrial projects. And since there is no other basis to screen out the project, a CEQA transportation analysis is required to address potential significant VMT impacts.

### Thresholds of Significance

For a project that does not meet the screening criteria, a project's VMT impact is determined by comparing the project VMT to the appropriate thresholds of significance (see Table 1) based on the type of development. The VMT thresholds of significance are established based on the existing citywide average VMT level for residential uses and the existing regional average VMT level for employment uses. Thus, projects that include industrial employment uses (such as the proposed project) are said to create a significant adverse impact when the estimated project-generated VMT exceeds the existing regional average VMT, which is 14.37 VMT per employee (significant impact threshold).

Projects that trigger a significant VMT impact can implement a variety of the four strategies described below to reduce the impact. A significant impact is said to be satisfactorily mitigated when the strategies and VMT reductions implemented render the VMT impact less than significant.

### VMT Analysis Methodology

To determine whether a project would result in CEQA transportation impacts related to VMT, the City has developed the San Jose VMT Evaluation Tool to streamline the analysis for residential, office, and industrial projects with local traffic. Accordingly, the City's VMT Evaluation Tool was used for this VMT analysis; it calculates VMT and compares it to the appropriate thresholds of significance based on the project location and type of development.

Based on the assessor's parcel number (APN) of a project, the VMT Evaluation Tool identifies the existing average VMT per capita and VMT per employee for the area. Based on the project location, type of development, project description, and proposed trip reduction measures, the evaluation tool calculates the project VMT. Projects located in areas where the existing VMT is above the established threshold are referred to as being in "high-VMT areas". Projects in high-VMT areas are required to include a set of VMT reduction measures that would reduce the project VMT to the extent possible.

**Table 1**  
**VTM Thresholds of Significance for Development Projects**

Project Types	Significance Criteria	Current Level	Threshold
<b>Residential Uses</b>	Project VMT per capita exceeds existing citywide average VMT per capita minus 15 percent <u>OR</u> existing regional average VMT per capita minus 15 percent, whichever is lower.	11.91 VMT per capita (Citywide Average)	10.12 VMT per capita
<b>General Employment Uses</b>	Project VMT per employee exceeds existing regional average VMT per employee minus 15 percent	14.37 VMT per employee (Regional Average)	12.21 VMT per employee
<b>Industrial Employment Uses</b>	Project VMT per employee exceeds existing regional average VMT per employee	14.37 VMT per employee (Regional Average)	14.37 VMT per employee
<b>Retail/ Hotel/ School Uses</b>	Net increase in existing regional total VMT	Regional Total VMT	Net Increase
<b>Public/Quasi-Public Uses</b>	In accordance with the most appropriate type(s) as determined by Public Works Director	Appropriate levels listed above	Appropriate thresholds listed above
<b>Mixed Uses</b>	Evaluate each land use component of a mixed-use project independently, and apply the threshold of significance for each land use type included	Appropriate levels listed above	Appropriate thresholds listed above
<b>Change of Use/ Additions to Existing Development</b>	Evaluate the full site with the change of use or additions to existing development, and apply the threshold of significance for each project type included	Appropriate levels listed above	Appropriate thresholds listed above
<b>Area Plans</b>	Evaluate each land use component of the area plan independently, and apply the threshold of significance for each land use type included	Appropriate levels listed above	Appropriate thresholds listed above
Source: City of San Jose, <i>2020 Transportation Analysis Handbook</i> , Table 2.			

The VMT Evaluation Tool evaluates a list of selected VMT reduction measures that can be applied to a project to reduce the project VMT. There are four strategy tiers whose effects on VMT can be calculated with the Evaluation Tool:

1. Project characteristics (e.g., density, diversity of uses, design, and affordability of housing) that encourage walking, biking and transit uses;
2. Multimodal network improvements that increase accessibility for transit users, bicyclists, and pedestrians;

3. Parking measures that discourage personal motorized vehicle-trips; and
4. Transportation Demand Management (TDM) measures that provide incentives and services to encourage alternatives to personal motorized vehicle-trips.

The first three strategies – land use characteristics, multimodal network improvements, and parking – are physical design strategies that can be incorporated into the project design. TDM includes programmatic measures that aim to reduce VMT by decreasing personal motorized vehicle mode share and by encouraging more walking, biking, and riding transit. TDM measures are typically enforced through annual trip monitoring to assess the project's status in meeting the VMT reduction goals.

## Edenvale Area Development Policy Conformance

The project site is located within the Edenvale Area Development Policy (EADP) boundaries. With approval of the nearby iStar development proposal in 2006, additional 494,000 s.f. of potential industrial development was approved for future industrial/R&D/office development within Edenvale Sub-Areas 1 and 3. The 494,000 s.f. of potential industrial development is an addition to the approximately 2.9 million s.f. of existing capacity remaining for Sub-Areas 1, 3, and 4 per the original EADP.

The project site is located in Edenvale Sub-Area 3, which means the site already has approval for industrial development as part of the EADP. The traffic study that was completed for the iStar development identified intersection improvements based on full buildout of the 494,000 s.f. of industrial development. The necessary intersection improvements that were identified have already been completed. For this reason, the project is not required to analyze any signalized intersections for potential adverse effects due to the project. The project is, however, required to report the existing intersection levels of service for informational purposes.

The project is required to be in conformance with the maximum allowable floor area ratio (FAR) for Edenvale Sub-Area 3 development, which is a maximum FAR of 0.40 for industrial development. The project would construct 225,000 square feet of building floor area on the 15.92-acre site, so the project FAR would be 0.32 and would be lower than the maximum allowable FAR of 0.40. Thus, the proposed project density is in conformance with the EADP.

## Local Transportation Analysis Scope

The non-CEQA LTA supplements the VMT analysis by identifying potential adverse operational effects that may arise due to a new development, as well as evaluating the effects of a new development on site access, circulation, and other safety-related elements in the proximate area of the project.

As part of the LTA, a project is generally required to conduct an intersection operations analysis if the project is expected to add 10 or more vehicle trips per hour per lane to any signalized intersection that is located within a half-mile of the project site. Based on these criteria, as outlined in the City's *Transportation Analysis Handbook*, a list of study intersections is then developed for the LTA. As previously described, City staff have determined that the project is not required to analyze any signalized intersections for potential adverse effects since the amount of industrial development proposed for the site (which is located in Edenvale Sub-Area 3) has already been approved as part of the EADP. The project is, however, required to report the existing intersection levels of service for informational purposes.

Based on the site location, project trip generation estimates and trip distribution pattern, the LTA includes an evaluation of AM and PM peak hour traffic conditions for the following six intersections:

1. Hellyer Avenue and Silver Creek Valley Road

2. Hellyer Avenue and Piercy Road
3. Hellyer Avenue/Basking Ridge Avenue and Silicon Valley Boulevard/Tennant Avenue
4. US 101 Northbound Ramps and Bernal Road/Silicon Valley Boulevard
5. US 101 Southbound Off-Ramp and Bernal Road (CMP)
6. SR 85 Southbound Ramps and Bernal Road (CMP)

Four signalized study intersections are designated CMP intersections. The VTA administers the CMP and monitors the PM peak-hour traffic conditions of CMP intersections.

Traffic conditions at the study intersections were reported for the weekday AM and PM peak hours of adjacent street traffic. The AM peak hour typically occurs between 7:00 AM and 9:00 AM and the PM peak hour typically occurs between 4:00 PM and 6:00 PM on a regular weekday. These are the peak commute hours during which most traffic congestion occurs on the roadways.

Traffic conditions were reported for existing conditions as described in detail below.

- **Existing Conditions.** Due to the current construction activity at the US 101/Blossom Hill interchange and schools out for summer break when the study was initiated, new traffic counts were not collected for the study. Accordingly, a 1 percent compounded annual growth factor was applied to the historical turning movement counts (from 2016 – 2018) provided by City staff for this project and the 2018 PM peak-hour counts at the CMP intersections to reflect existing (2022) traffic volumes.

Additionally, intersection traffic volumes were estimated for background conditions, background plus project conditions, and cumulative conditions for the purpose of evaluating intersection vehicle queueing. The traffic scenarios are described in detail below.

- **Background Conditions.** Background traffic volumes reflect traffic added by nearby approved projects that are not yet completed or occupied. The added traffic from approved but not yet completed developments was provided by the City of San Jose in the form of the Approved Trips Inventory (ATI).
- **Background Plus Project Conditions.** Background plus project conditions reflect projected traffic volumes on the planned roadway network with completion of the project and approved developments that are not yet completed or occupied. Background plus project traffic volumes were estimated by adding to background traffic volumes the additional traffic generated by the project.
- **Cumulative Conditions.** Near-term cumulative traffic volumes reflect projected traffic volumes with completion of the pending developments in the area, as well as the proposed project and approved developments. Cumulative conditions include trips associated with the light industrial developments at 455, 469, and 550 Piercy Road.

The LTA also includes a freeway ramp operations analysis, a vehicle queuing analysis, an evaluation of potential project adverse effects on bicycle, pedestrian, and transit facilities, and a review of site access, on-site circulation, and parking demand.

## Intersection Operations Analysis Methodology

This section presents the methods used to determine the traffic conditions at the study intersections. It includes descriptions of the data requirements, the analysis methodologies, and the applicable intersection level of service standards. The study intersections are located within the City of San Jose and were evaluated according to the City of San Jose level of service (LOS) standards for informational purposes.

## Data Requirements

The data required for the analysis were obtained from the City of San Jose and field observations. The following data were collected from these sources:

- existing traffic volumes
- trips from approved projects
- existing lane configurations
- signal timing and phasing

## Level of Service Standards and Analysis Methodologies

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The various analysis methods are described below.

### Signalized Intersections

The signalized study intersections are subject to the City of San Jose's level of service standards. The City of San Jose evaluates level of service at signalized intersections based on the 2000 *Highway Capacity Manual (HCM)* level of service methodology using TRAFFIX software. Since TRAFFIX is the level of service analysis software for the CMP signalized intersections, the City employs the CMP default values for the analysis parameters. This HCM method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. The City of San Jose level of service standard for signalized intersections is LOS D or better. The correlation between average control delay and level of service is shown in Table 2.

### CMP Signalized Intersections

Since TRAFFIX is the designated level of service methodology for the CMP and the City of San Jose, the four CMP study intersections were not analyzed separately, but rather are among the signalized intersections analyzed using TRAFFIX. The only difference between the City of San Jose and CMP analyses is that the CMP level of service standard for signalized intersections is LOS E or better.

## Intersection Vehicle Queuing Analysis

The analysis of intersection operations was supplemented with a vehicle queuing analysis at study intersections where the project would add a noteworthy number of trips to the left-turn movements. Similar to the intersection level of service analysis, the intersection queuing analysis is presented for informational purposes only. The City of San Jose has not defined a policy related to queuing. Vehicle queues were estimated using a Poisson probability distribution, which estimates the probability of "n" vehicles for a vehicle movement using the following formula:

$$P(x = n) = \frac{\lambda^n e^{-\lambda}}{n!}$$

Where:

$P(x = n)$  = probability of "n" vehicles in queue per lane

$n$  = number of vehicles in the queue per lane

$\lambda$  = average # of vehicles in the queue per lane (vehicles per hr. per lane/signal cycles per hr.)

The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95th percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25

feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement.

**Table 2**  
**Signalized Intersection Level of Service Definitions Based on Control Delay**

Level of Service	Description	Average Control Delay (seconds/vehicle)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	10.0 or less
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delays indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	55.1 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	greater than 80.0

Source: Transportation Research Board, *2000 Highway Capacity Manual* (Washington, D.C., 2000), p.10-16.

For signalized intersections, the 95th percentile queue length value indicates that during the peak hour, a queue of this length or less would occur on 95 percent of the signal cycles. Or, a queue length larger than the 95th percentile queue would only occur on 5 percent of the signal cycles (about 3 cycles during the peak hour for a signal with a 60-second cycle length). Therefore, left-turn pocket storage designs based on the 95th percentile queue length would ensure that storage space would be exceeded only 5 percent of the time for a signalized movement.

## Report Organization

This report has a total of five chapters. Chapter 2 describes the existing roadway network, transit service, bicycle, and pedestrian facilities. Chapter 3 describes the CEQA transportation analysis, including the project VMT impact analysis, mitigation measures to reduce the VMT impact, and cumulative transportation impact assessment. Chapter 4 describes the local transportation analysis (LTA) including the method by which project traffic is estimated, intersection operations analysis, intersection vehicle queuing analysis, freeway ramp operation evaluation, site access and on-site circulation review, effects on bicycle, pedestrian, and transit facilities, and parking. Chapter 5 presents the conclusions of the transportation analysis.



## 2. Existing Conditions

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This chapter describes the existing conditions of the transportation system within the study area of the project. It presents the VMT of the existing land uses in the proximity of the project and describes transportation facilities in the vicinity of the project site, including the roadway network, transit service, and pedestrian and bicycle facilities. The analysis of existing intersection operations is included as part of the LTA (see Chapter 4).

### VMT of Existing Land Uses

To determine whether a project would result in CEQA transportation impacts related to VMT, the City has developed the San Jose VMT Evaluation Tool to streamline the analysis for residential, office, and industrial projects. Based on the Evaluation Tool and the project's APN, the existing Area VMT for industrial uses in the project vicinity is 14.89 VMT per worker. The current regional average VMT for industrial uses is 14.37 VMT per worker (see Table 1 in Chapter 1). Thus, the VMT levels of existing industrial uses in the project area are slightly higher than the regional average VMT levels. The VMT Evaluation Tool summary report for the project is included in Chapter 3.

### Existing Roadway Network

Regional access to the project site is provided by US 101, SR 85, and Monterey Road.

**US 101** is an eight-lane freeway (three mixed-flow lanes and one HOV lane in each direction) in the vicinity of the site. US 101 extends northward through San Francisco and southward through Gilroy. Access to and from the site is provided via full interchanges at Blossom Hill Road/Silver Creek Valley Road and Bernal Road/Silicon Valley Boulevard.

**SR 85** is a predominantly north-south freeway that is oriented in an east-west direction in the vicinity of the project site. It extends from Mountain View to south San Jose, terminating at US 101. SR 85 is a six-lane freeway with four mixed-flow lanes and two HOV lanes. SR 85 provides access to the project site via an interchange at Bernal Road.

**Monterey Road** is a four- to six-lane north-south oriented Grand Boulevard that extends from Alma Street in downtown San Jose to US 101 south of the City of Gilroy. Monterey Road has a raised median island with left-turn pockets and has a posted speed limit of 55 mph in the project vicinity. A sidewalk is provided on the east side of the street only while striped bike lanes are provided on both sides. Monterey Road provides access to the project site via interchanges at Blossom Hill Road and Bernal Road.

Other roadways within the project study area include Blossom Hill Road, Silver Creek Valley Road, Bernal Road, Silicon Valley Boulevard, Tennant Avenue, Hellyer Avenue, and Piercy Road. For the purposes of this study, Hellyer Avenue and Piercy Road are considered to run north-south, and cross streets, Blossom Hill Road, Silver Creek Valley Road, Bernal Road, Silicon Valley Boulevard, and Tennant Avenue, are considered to run east-west. These roadways are described below.

**Blossom Hill Road** is a six-lane divided arterial that runs in an east-west direction from the US 101/Silver Creek Valley Road interchange to the town of Los Gatos. In the vicinity of the proposed project, it has a posted speed of 40 mph and has an interchange with the US 101 southbound ramps. East of the interchange, Blossom Hill Road becomes Silver Creek Valley Road. There are no bike lanes between US 101 and Monterey Road. A sidewalk is provided along the north side of the Blossom Hill Road overpass that connects Silver Creek Valley Road to Monterey Road. Blossom Hill Road is a designated Main Street west of Snell Avenue and a designated City Connector Street east of Snell Avenue. Blossom Hill Road provides access to the project site via Silver Creek Valley Road.

**Silver Creek Valley Road** is generally a divided four-lane arterial that extends from the US 101/Blossom Hill Road interchange in the west to Yerba Buena Road in the east. In the vicinity of the proposed project, Silver Creek Valley Road has a posted speed of 45 mph, has an interchange with the US 101 northbound ramps, and provides access to the project site via Hellyer Avenue and Piercy Road. Silver Creek Valley Road is a designated On-Street Primary Bicycle Facility with striped bike lanes and sidewalks on both sides of the street between US 101 and Hellyer Avenue. East of Hellyer Avenue, Silver Creek Valley Road has a sidewalk on one side of the street only.

**Bernal Road** is a six-lane divided City Connector Street that intersects US 101, SR 85 and Monterey Road. Bernal Road has a posted speed limit of 40 mph and has striped bike lanes on both sides of the street west of San Ignacio Avenue. There are sidewalks on both sides of the street in the project vicinity. East of US 101, Bernal Road becomes Silicon Valley Boulevard. Bernal Road provides access to the project site via Silicon Valley Boulevard.

**Silicon Valley Boulevard** is a four-lane divided City Connector Street that transitions from Bernal Road west of US 101 and becomes Tennant Avenue east of Hellyer Avenue. Silicon Valley Boulevard has a posted speed limit of 40 mph. Silicon Valley Boulevard includes continuous sidewalks along the north side but has limited sidewalks along the south side. It provides access to the project site via Tennant Avenue and Hellyer Avenue.

**Tennant Avenue** is a two-lane local street that transitions from Silicon Valley Boulevard west of Hellyer Avenue and terminates at its intersection with Piercy Road. Tennant Avenue has a posted speed limit of 30 mph. Tennant Avenue has sidewalks along the north side of the street. It provides direct access to the project site.

**Hellyer Avenue** is a four-lane divided City Connector Street with a posted speed limit of 45 mph. Hellyer Avenue extends northward from Silicon Valley Boulevard until its intersection with Senter Road. Hellyer Avenue has striped bike lanes along the extent of the roadway and sidewalks on the east side of the street in the immediate vicinity of the project site. Hellyer Avenue provides direct access to the project site.

**Piercy Road** is a two-lane City Connector Street that extends southward from Silver Creek Valley Road, runs east-west through its intersection with Hellyer Avenue, and runs north-south again ultimately terminating at its intersection with Tennant Avenue. Piercy Road does not have a posted speed limit between Hellyer Avenue and Tennant Avenue. However, based on the posted speed limit on Tennant Avenue, the post speed limit is expected to be 30 mph. Sidewalks are provided along both sides of the street west of Hellyer Avenue. Sidewalks are provided along the west side of the street only where Piercy Road bends to the southeast of Hellyer Avenue. Piercy Road provides direct access to the project site.



## Existing Intersection Lane Configurations

The existing lane configurations at the study intersections are shown on Figure 4.

## Existing Pedestrian and Bicycle Facilities

Pedestrian facilities consist of sidewalks and crosswalks in the project vicinity, as well as the Coyote Creek Trail. Crosswalks with pedestrian signal heads and push buttons are located at all the signalized intersections in the study area. There are existing sidewalks along the entire project frontage on Hellyer Avenue, Tennant Avenue, and Piercy Road. On Hellyer Avenue, between Silver Creek Valley Road and Tennant Avenue/Silicon Valley Boulevard, there are sidewalks along northbound Hellyer Avenue and along portions of southbound Hellyer Avenue. Piercy Road has sidewalks on both sides between Silver Creek Valley Road and Hellyer Avenue, and on the southbound side of the street between Hellyer Avenue and Tennant Avenue. Tennant Avenue has sidewalks on the westbound side of the street. There are existing crosswalks, pedestrian pushbuttons, and accessible ramps at the nearby signalized intersections of Hellyer Avenue/Piercy Road and Hellyer Avenue/Basking Ridge Avenue/Silicon Valley Boulevard/Tennant Avenue.

The Coyote Creek Multi-Use Trail is approximately 20 miles long and connects to Silver Creek Valley Road, Yerba Buena Road, and Capitol Expressway. The closest trail access is provided at the intersection of Eden Park Place and Silicon Valley Boulevard, approximately 1,000 feet west of the project site. The Coyote Creek Trail is a shared pedestrian and bicycle facility that is separated from motor vehicle traffic. This trail qualifies as a Class I bicycle facility.

Additional bicycle facilities in the project vicinity consist of on-street bike lanes. Bike lanes (Class II bicycle facilities) or buffered bike lanes (Class IIB) are provided on the roadways listed below.

- Hellyer Avenue (Class IIB south of Dove Road)
- Silver Creek Valley Road (Class IIB north/east of Hellyer Avenue, Class II west of Hellyer Avenue)
- Monterey Road (Class IIB north of Blossom Hill Road, Class II south of Blossom Hill Road)

Existing bicycle facilities within the study area are shown on Figure 5.

## Existing Transit Service

The project site is served by only one bus route. Bus service is provided by VTA Local Route 42. Route 42 travels along Silver Creek Valley Road, Hellyer Avenue and Silicon Valley Boulevard in the project vicinity and provides service between Evergreen Valley College and Santa Teresa Station. Route 42 runs on 60-minute headways between 6:00 AM and 7:00 PM and provides service to the Blossom Hill Caltrain station via its connection to Rapid Route 568. The Blossom Hill Caltrain Station is located about 2.5 miles from the project site at the intersection of Monterey Road/Ford Road. Local Route 42 has stops on Silicon Valley Boulevard at Eden Park Place approximately 1,300 feet from the project site.

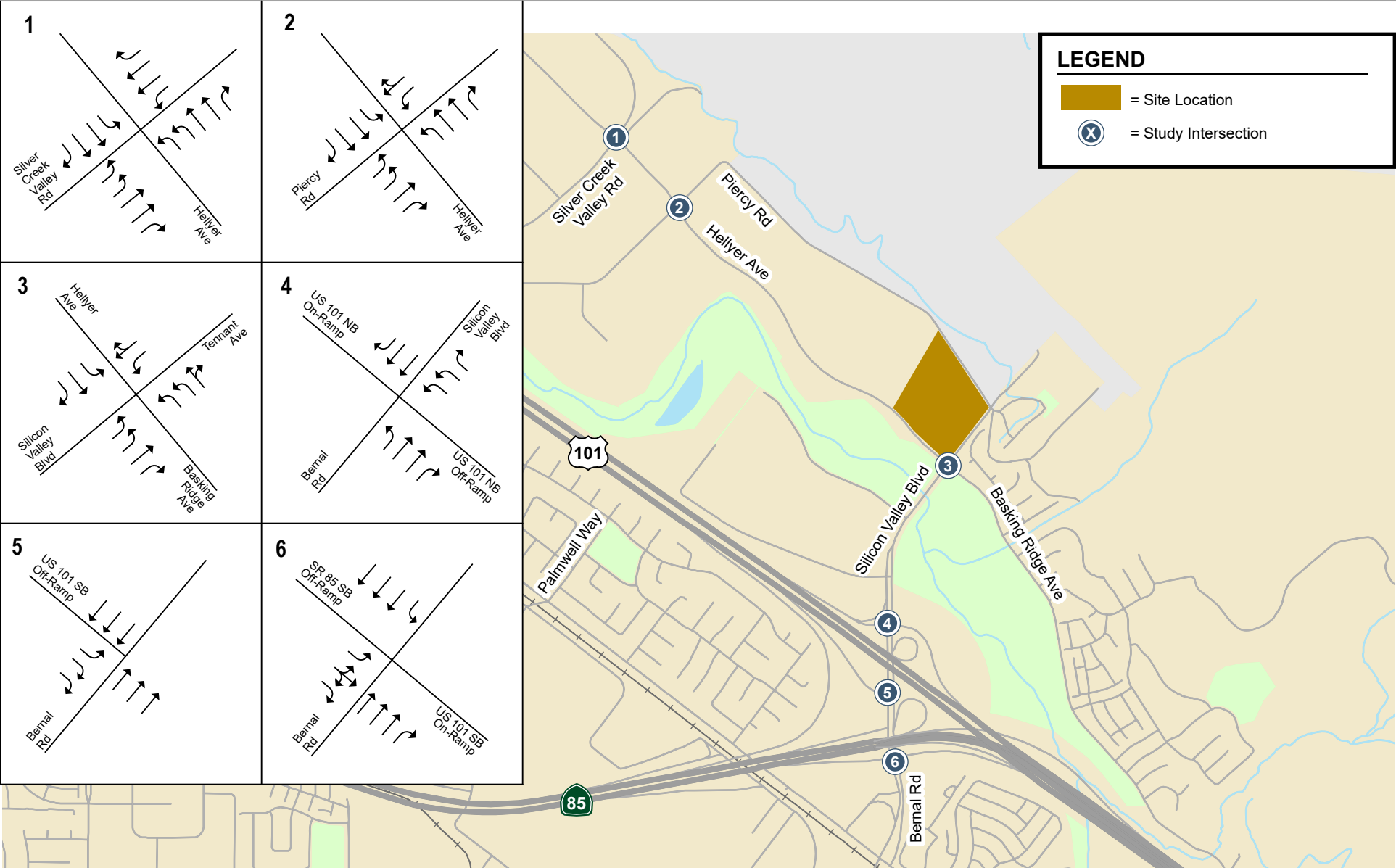


Figure 4  
Existing Lane Configurations



**Figure 5**  
**Existing Bicycle Facilities**

### 3.

## CEQA Transportation Analysis

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This chapter describes the CEQA transportation analysis, including the VMT threshold of significance, the project-level VMT impact analysis results, any mitigation measures to reduce a VMT impact, and the cumulative transportation impact analysis used to determine consistency with the City's General Plan.

### Project Level VMT Analysis

The project-level impact analysis under CEQA uses the VMT metric to evaluate a project's transportation impact by comparing against the VMT thresholds of significance as established in the Transportation Analysis Policy. The San Jose VMT Evaluation Tool is used to estimate the project VMT based on the project location (APN), type of development, project description, and proposed trip reduction measures. The threshold of significance for industrial employment uses (see Table 1 in Chapter 1) was used for the VMT analysis. The VMT threshold for industrial employment uses is the existing regional average VMT level of 14.37 miles per employee.

The proposed light industrial buildings would include 20,000 square feet of office space with the remaining 196,378 square feet be used for warehousing. The office space is about 9 percent of the total building floor area (based on the total square footage of 216,252 shown on the site plan). Based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, a light industrial facility typically also includes a small ancillary office space as part of normal operation of the facility. Therefore, light industrial trip rates were applied to the total building floor area for the trip generation estimate. Similarly, the project was analyzed as an industrial land use for VMT analysis purpose.

### Project VMT Impact Analysis Results

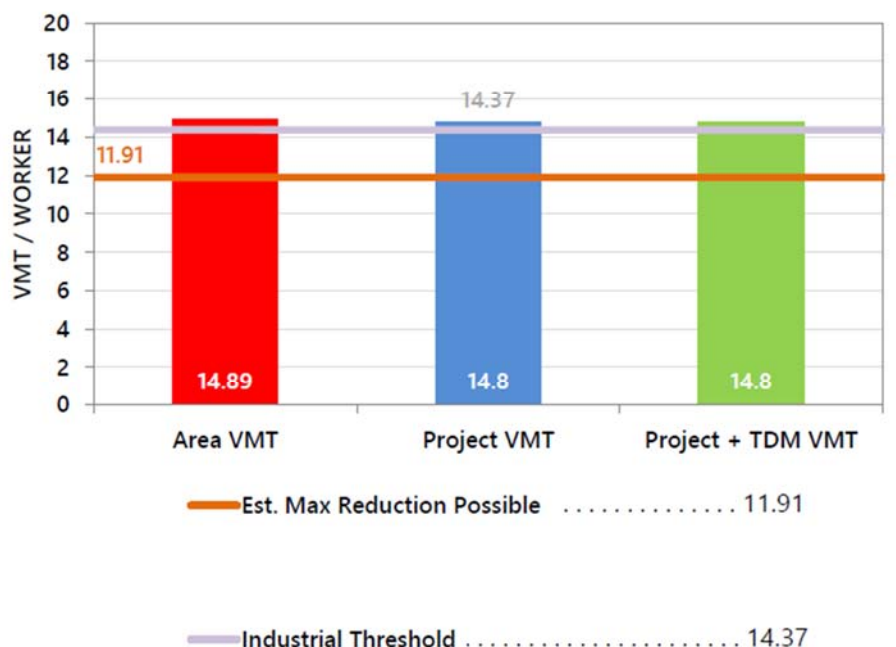
Per the City's VMT Evaluation Tool, the existing Area VMT for employment uses is 14.89 VMT per worker, which is above the existing regional average threshold of 14.37 VMT per worker (see Figure 6). The project VMT estimated by the Evaluation Tool is 14.80 VMT per worker, which also exceeds the industrial threshold of 14.37 VMT per worker. According to the *Transportation Analysis Handbook* (April 2020), projects located in areas where the existing VMT is above the established threshold are referred to as being in "high-VMT areas" and are required to include VMT reduction measures that would reduce the project VMT to the extent possible.

### Project Impact

Since the VMT generated by the project would exceed the threshold of significance for industrial employment uses in the area, the project would result in a significant transportation impact on VMT, and mitigation measures are required to reduce the VMT impact to a less-than-significant level.

### EMPLOYMENT ONLY

The tool estimates that the project would generate per non-industrial worker VMT and per industrial worker VMT above the City's threshold.



**Figure 6**  
**VMT Analysis without Mitigations**

### Project Mitigation

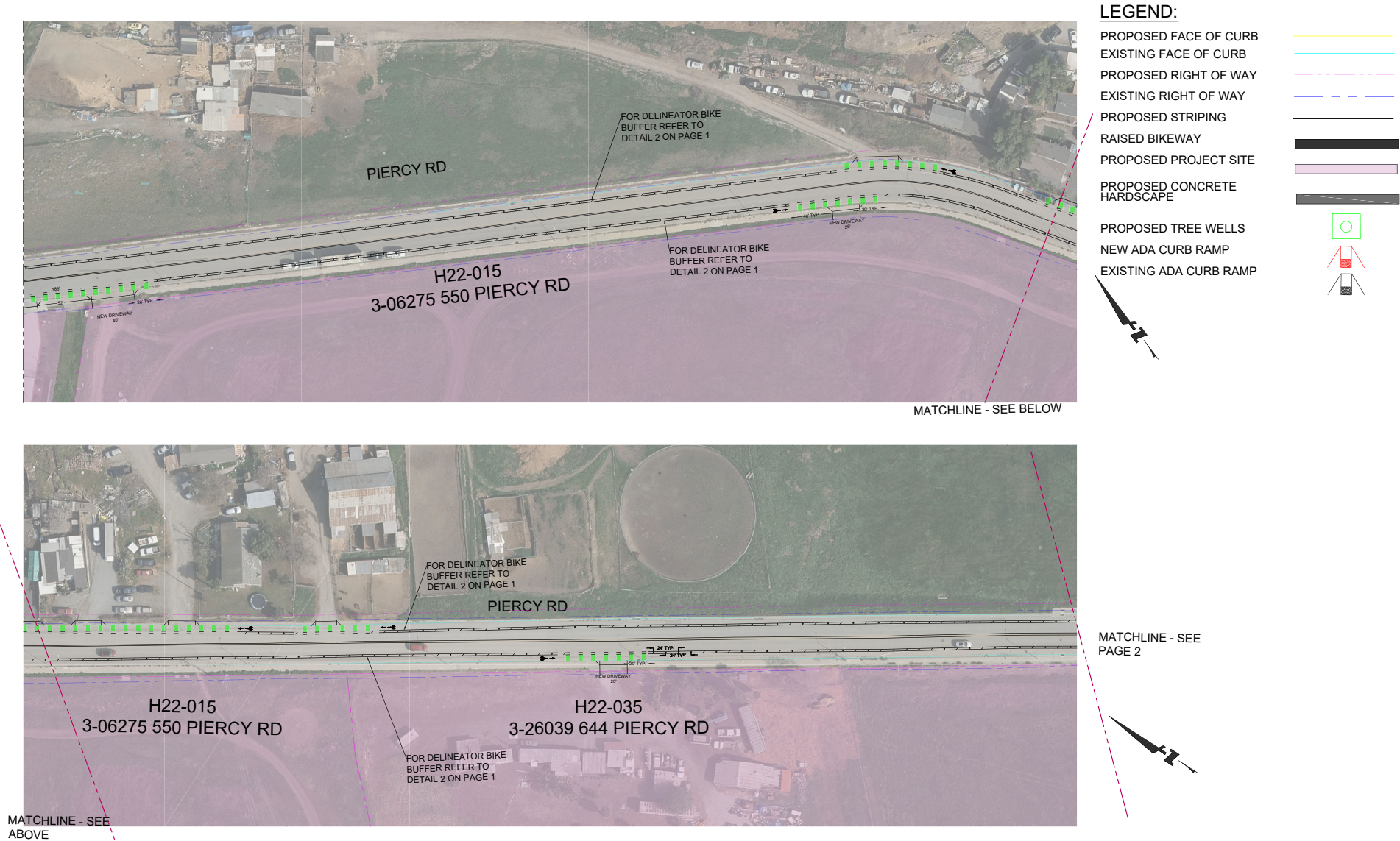
Implementation of the following off-site multimodal infrastructure improvement (Tier 2 VMT reduction strategy) and Tier 4 TDM program would mitigate the significant VMT impact:

- **Traffic Calming Measure and Bike Access Improvement** – The project should narrow the existing roadway lane widths along Piercy Road and Tennant Avenue to implement Class IV protected bikeways with delineator bike buffers between Hellyer Avenue and Silicon Valley Boulevard/Basking Ridge Avenue. Figure 7 shows the planned bikeway improvements in the project vicinity. Planline exhibits for the planned bikeway improvements along Piercy Road/Tennant Avenue, Hellyer Avenue, and Silicon Valley Boulevard in the project area are included in Appendix A.

Project will be required to install plastic bollard delineators along the following segments:

- Along both sides of Piercy Road from Hellyer Avenue to the start of the 550 Piercy Road project frontage.
- Along the east side of Piercy Road from the start of the 550 Piercy Road project frontage to Tennant Avenue.
- Along the south side of Tennant Avenue from Piercy Road to Hellyer Avenue-Basking Ridge Avenue.



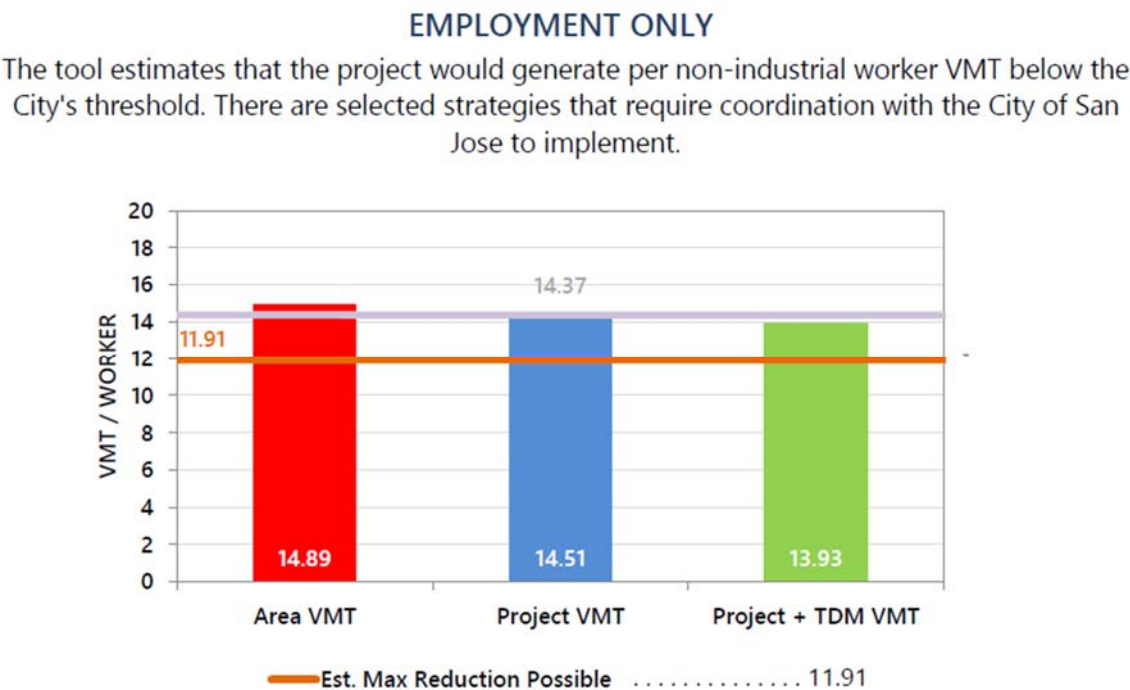


**Figure 7**  
**Piercy Road - Tennant Avenue Bikeway Improvements**

- **Commute Trip Reduction Marketing and Education** – The project should implement a marketing campaign targeting all employees that encourages the use of shared rides and active modes of transportation. Marketing strategies may include new employee orientation on alternative commute options, event promotions, publications and electronic (email) communications. The project should provide information and encouragement to use transit services, shared ride modes (i.e., carpooling), and active modes to reduce drive-alone commute trips and, thus, VMT. It is assumed that 100 percent of the project employees would participate in the commute trip reduction marketing and education program.

Based on the City’s VMT Evaluation Tool, implementing the above recommended mitigation measures would lower the project VMT to 13.93 per worker (see Figure 8), which would reduce the project impact to a less-than-significant level (below the industrial threshold of 14.37 VMT per worker).

Appendix B shows the VMT summary reports generated by the City of San Jose’s VMT Evaluation Tool without and with implementation of the recommended mitigation measures, respectively.



**Figure 8**  
**VMT Analysis with Mitigations**

**Cumulative VMT Impact Analysis**

Projects must demonstrate consistency with the *Envision San Jose 2040 General Plan* to address cumulative impacts. Consistency with the City’s General Plan is based on a consideration of all its aspects, including the project’s density, design, and ability to further the General Plan goals and policies and not obstruct their attainment. If a project is determined to be inconsistent with the General Plan, a cumulative impact analysis is required as part of the City’s *Transportation Analysis Handbook*.

According to the *Envision San Jose 2040 General Plan*, the project site is designated as *Industrial Park* (IP). This land use designation is intended for a wide variety of industrial uses such as research and development (R&D), manufacturing, assembly, testing, and office uses. Industrial uses are consistent

with this designation insofar as any functional or operational characteristics of a hazardous or nuisance nature can be mitigated through design controls.

The proposed industrial project is consistent with the uses allowed within the *Industrial Park* land use designation and is consistent with the following City of San Jose Land Use Policies:

- Land Use Policy LU-6.4: Encourage the development of new industrial areas and the redevelopment of existing older or marginal industrial areas with new industrial uses, particularly in locations which facilitate efficient commute patterns.
- Land Use Policy LU-6.5: Maintain and create Light Industrial and Heavy Industrial designated sites that are at least one acre in size in order to facilitate viable industrial uses.
- Land Use Policy LU-7.1: Encourage industrial supplier/service business retention and expansion in appropriate areas in the City.

The proposed project is consistent with the Envision San Jose 2040 General Plan and would not require a General Plan Amendment (GPA). The construction of a new industrial building would facilitate the development of an industrial site and would help retain industrial designated land within the City. Thus, the project would be considered part of the cumulative solution to meet the General Plan's long-range transportation goals and would result in a less-than-significant cumulative impact.



## 4.

# Local Transportation Analysis

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This chapter describes the non-CEQA local transportation analysis (LTA) including existing traffic conditions, the method by which project traffic is estimated, existing intersection operations, intersection queuing analysis, freeway segment, and freeway ramp analysis, site access and on-site circulation review, effects on bicycle, pedestrian and transit facilities, and parking supply.

### Intersection Operations Analysis

The intersection operations analysis is intended to quantify the operations of the signalized study intersections for informational purposes. Information required for the intersection operations analysis related to project trip generation, trip distribution, and trip assignment are presented in this section.

### Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the site is estimated for the AM and PM peak hours. As part of the project trip distribution, the directions to and from which the project trips would travel are estimated. In the project trip assignment, the project trips are assigned to specific streets and intersections. These procedures are described below.

### Trip Generation

Through empirical research, data have been collected that quantify the amount of traffic produced by many types of land uses. This research is compiled in the *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers (ITE). The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rate(s) by the size of the development. Trips that would be generated by the proposed project were estimated using the ITE trip rates for General Light Industrial (ITE Land Use 110) located in a general urban/suburban setting.

### Trip Adjustments and Reductions

In accordance with San Jose's *Transportation Analysis Handbook* (April 2020, Section 4.8, "Intersection Operations Analysis"), the project is eligible for adjustments and reductions from the baseline trip generation. Based on the 2020 San Jose guidelines, the project qualifies for a location-based adjustment. The location-based adjustment reflects the project's vehicle mode share based on the "place type" in which the project is located per the San Jose Travel Demand Model. The project's place type was obtained from the San Jose VMT Evaluation Tool. Based on the Evaluation Tool, the project

site is located within a *Suburban with Single-Family Homes* place type. Therefore, the baseline project trips were adjusted to reflect the mode share associated with this place type.

Industrial developments located within areas designated *Suburban with Single-Family Homes* have a vehicle mode share of 95 percent (according to Table 6 of the City's *Transportation Analysis Handbook*). Thus, a 5 percent reduction was applied to the project trip generation estimates based on the location-based vehicle mode share outputs produced from the San Jose Travel Demand Model.

### **Net Project Trips**

After applying the ITE trip rates to the proposed project and applying the appropriate trip reduction, it is estimated that the project would generate 1,041 new daily trips, with 159 new trips (140 inbound and 19 outbound) occurring during the AM peak hour and 139 new trips (19 inbound and 120 outbound) occurring during the PM peak hour (See Table 3).

**Table 3**  
**Project Trip Generation Estimates**

Project Trip Generation Estimates													
Land Use	Size		Daily		AM Peak Hour				PM Peak Hour				
			Rate	Trips	Rate	In	Out	Total	Rate	In	Out	Total	
Light Industrial <sup>1</sup>	225.0	ksf	4.87	1,096	0.74	147	20	167	0.65	20	126	146	
Location-Based Vehicle Mode Share (5%) <sup>2</sup>				(55)		(7)	(1)	(8)		(1)	(6)	(7)	
Total Project Trips:				1,041		140	19	159		19	120	139	
Notes:													
1. Trip generation based on average rates contained in the ITE Trip Generation Manual, 11th Edition, for General Light Industrial (Land Use 110). Rates are expressed in trips per 1,000 s.f.													
2. A 5% reduction was applied based on the location-based vehicle mode share percentage outputs (contained in Table 6 of the City's TA Handbook) produced from the San Jose Travel Demand Model for the Place Type "Suburban with Single-Family Homes".													

### **Trip Distribution and Assignment**

The trip distribution pattern for the project was estimated based on existing travel patterns on the surrounding roadway system, freeway access, and the locations of complementary land uses. The peak-hour vehicle trips associated with the project were added to the roadway network in accordance with the trip distribution pattern (see Figure 9). Due to the median on Hellyer Avenue along the project frontage, the southern driveway on Hellyer Avenue would be restricted to right turns only while the northern driveway would be a full access driveway.

### **Roadway Network**

The roadway network under background and cumulative conditions is assumed to be the same as under existing conditions because there are no planned and funded transportation improvements at the study intersections that would alter the existing intersection lane configurations, and the project would not alter the existing intersection lane configurations.

### **Traffic Volumes**

The AM and PM peak-hour intersection volumes under existing, background, background plus project, and cumulative plus project conditions are shown on Figures 10, 11, 12, and 13, respectively. Traffic volumes for all scenarios are tabulated in Appendix C.

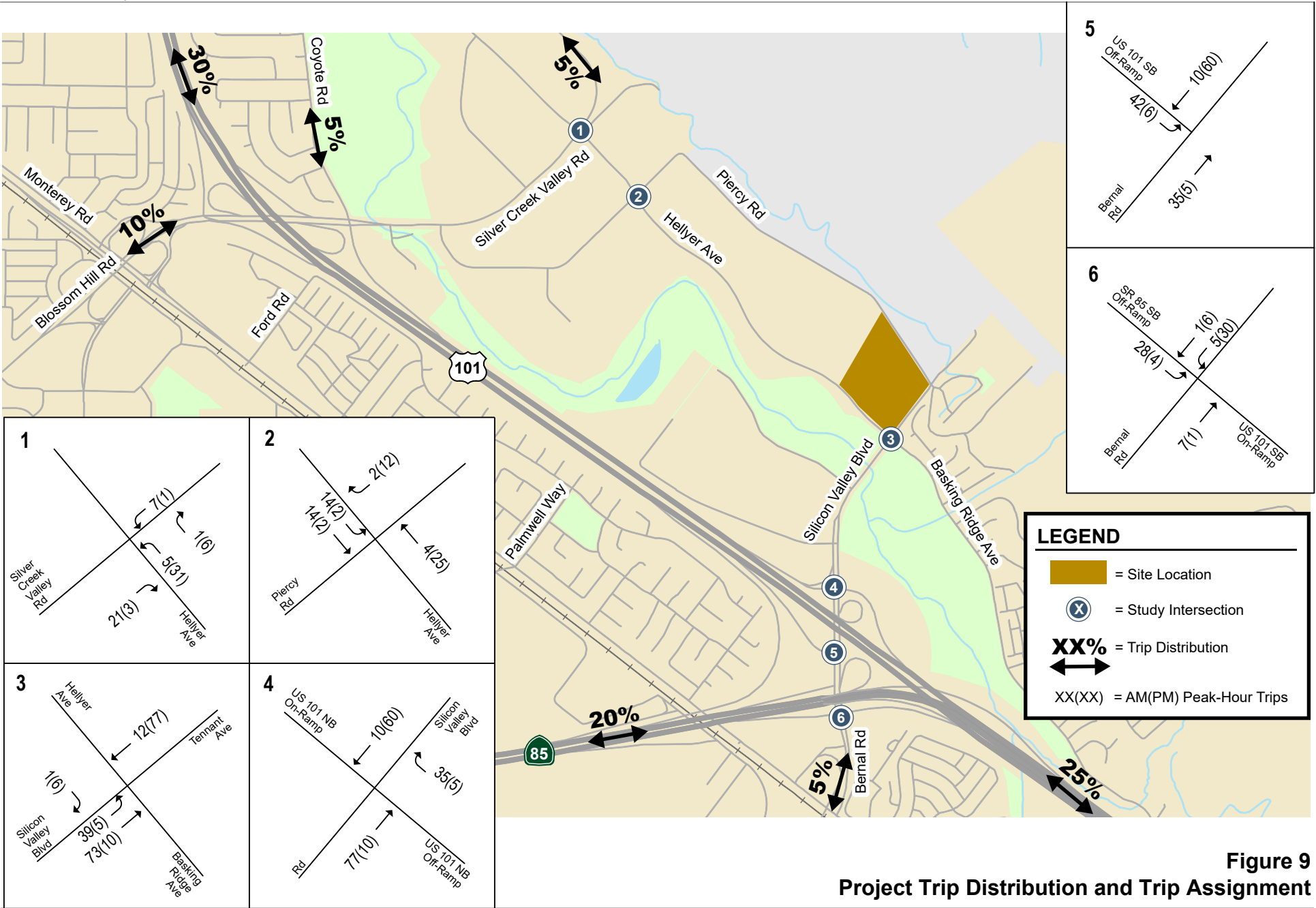
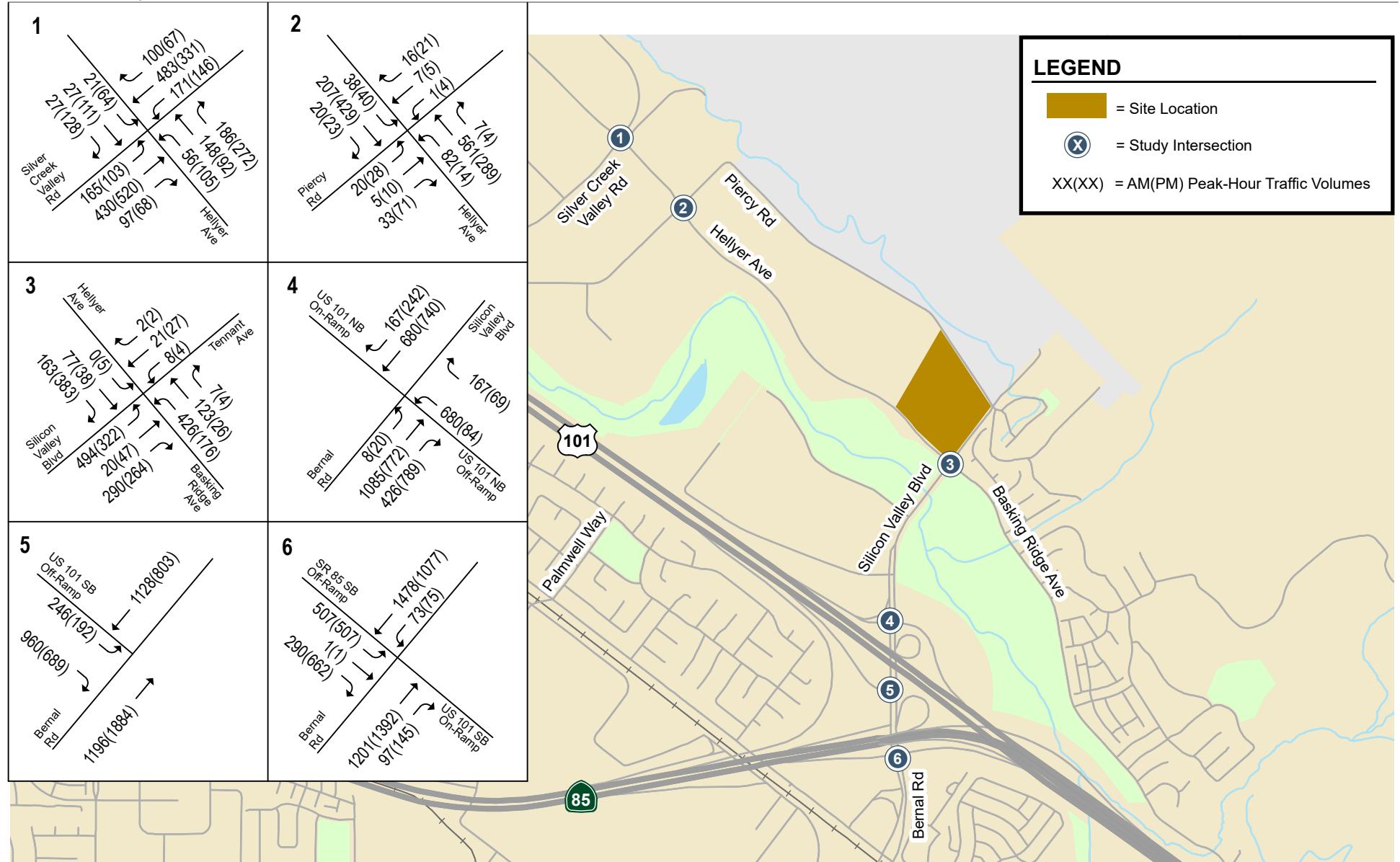


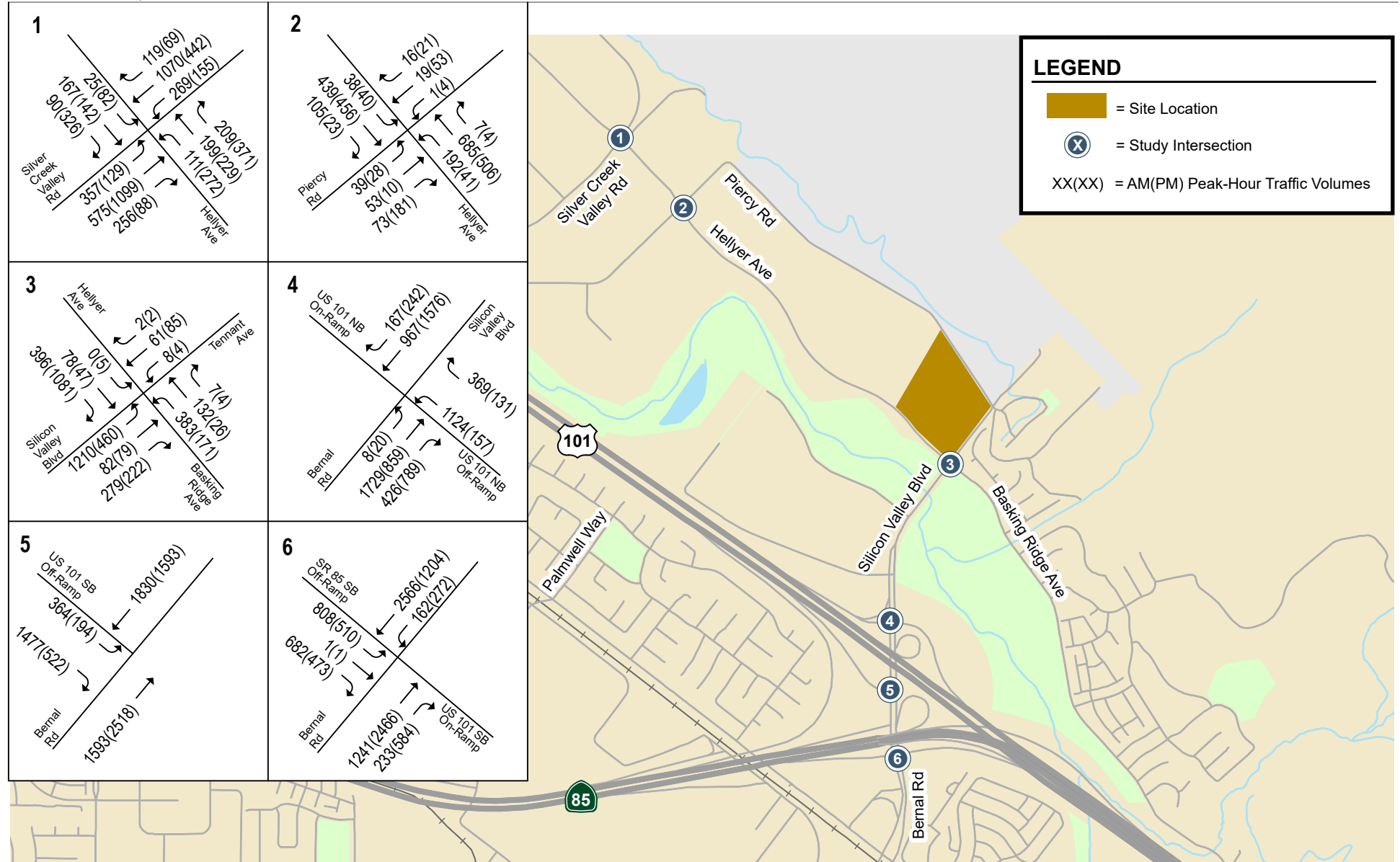
Figure 9  
Project Trip Distribution and Trip Assignment

# 644 & 675 Piercy Road Industrial



**Figure 10**  
**Existing Traffic Volumes**

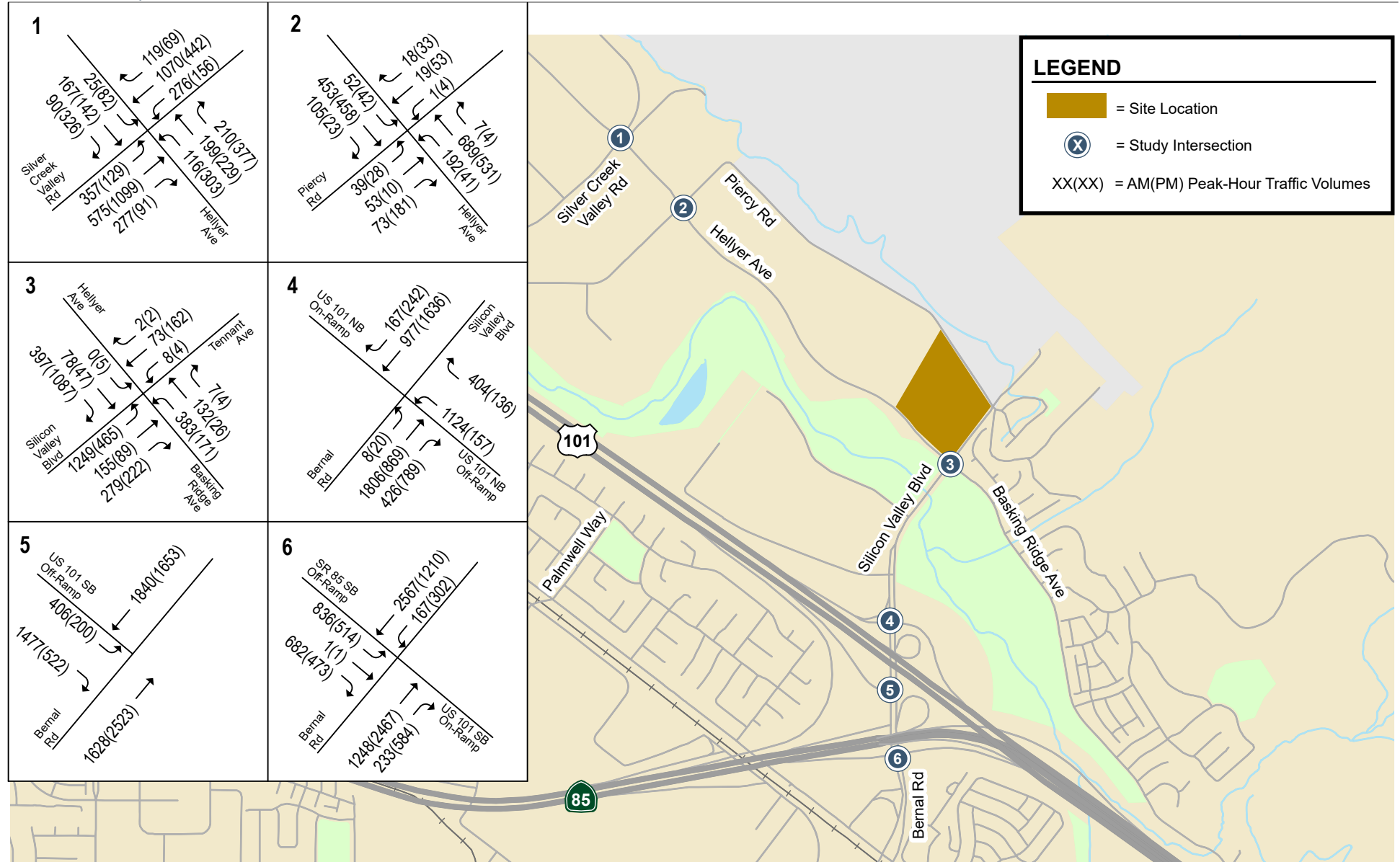
# 644 & 675 Piercy Road Industrial



**Figure 11**  
**Background Traffic Volumes**

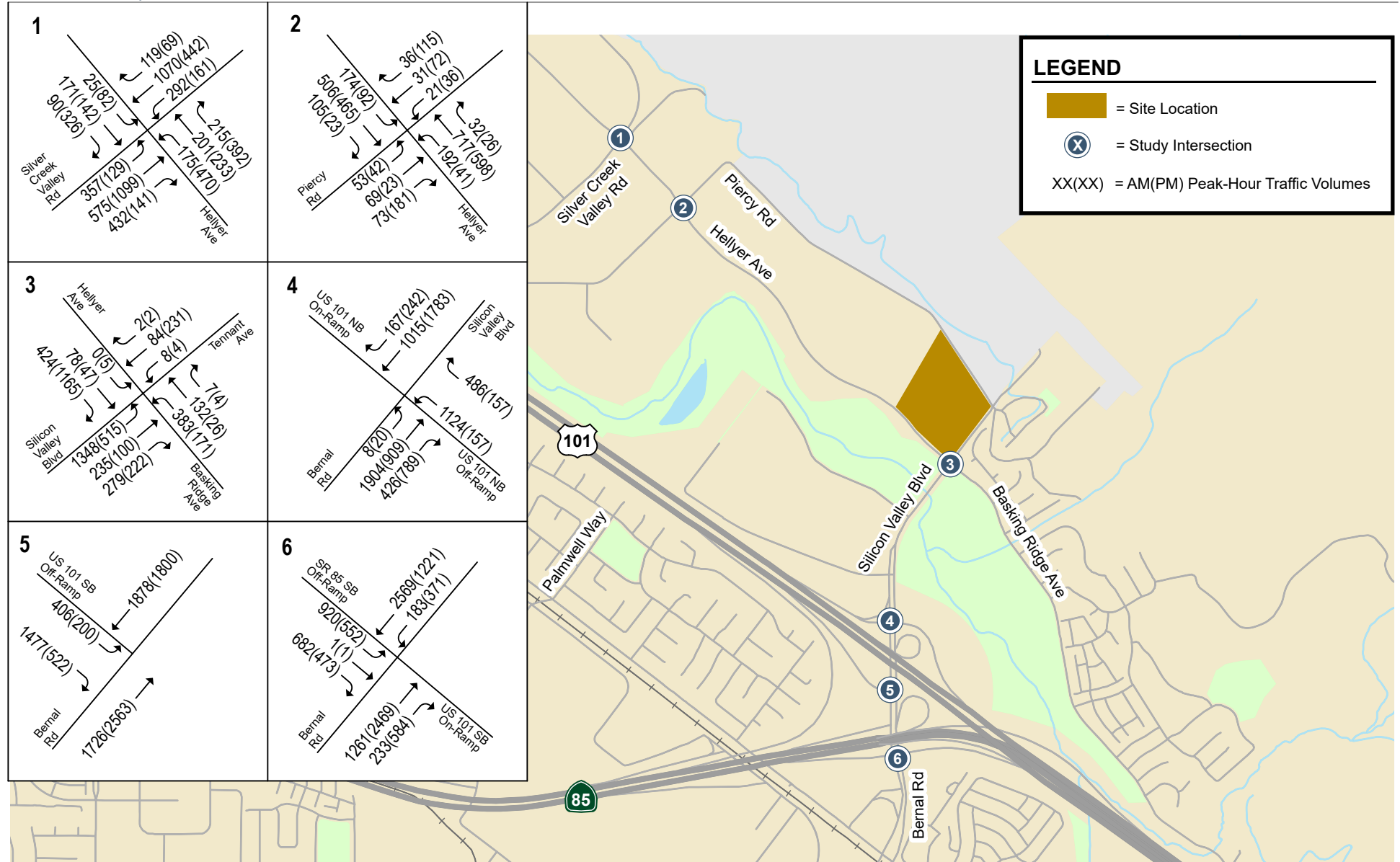


# 644 & 675 Piercy Road Industrial



**Figure 12**  
**Background Plus Project Traffic Volumes**

# 644 & 675 Piercy Road Industrial



**Figure 13**  
**Cumulative Plus Project Traffic Volumes**

### **Existing Traffic Volumes**

Existing AM and PM peak-hour traffic volumes were obtained from previous traffic count data provided by the City staff and new turning movement counts collected in October 2022 for the project. The comparison of new and previous counts shows that the new counts are lower than the previous counts at the following intersections. Accordingly, a 1 percent compounded annual growth factor was applied to the historical turning movement counts and the 2018 PM peak-hour counts at the CMP intersections to reflect existing (2022) AM and PM peak-hour traffic volumes for these intersections. The historical counts used were conducted in 2016 and 2018.

1. Hellyer Avenue and Silver Creek Valley Road
4. US 101 Northbound Ramps and Bernal Road/Silicon Valley Boulevard
5. US 101 Southbound Off-Ramp and Bernal Road (CMP)
6. SR 85 Southbound Ramps and Bernal Road (CMP)

The new counts are higher than the previous counts at the following two intersections and were used for the study directly. The new turning movement counts for these two intersections are included Appendix D.

2. Hellyer Avenue and Piercy Road
3. Hellyer Avenue/Basking Ridge Avenue and Silicon Valley Boulevard/Tennant Avenue

### **Background Traffic Volumes**

Background AM and PM peak hour traffic volumes were estimated by adding to existing traffic volumes the trips generated by nearby approved but not yet completed or occupied projects. The vehicular trips associated with the approved projects in the area are listed in the City of San Jose's Approved Trips Inventory (ATI) contained in Appendix E.

### **Background Plus Project Traffic Volumes**

Project trips were added to background traffic volumes to obtain background plus project traffic volumes.

### **Cumulative Plus Project Traffic Volumes**

Near-term cumulative traffic volumes reflect projected traffic volumes with completion of the pending developments in the area, as well as the proposed project and approved developments. The trips associated with the light industrial developments located at 455, 469, and 550 Piercy Road was assumed under cumulative conditions. The pending trips were added to background plus project traffic volumes to obtain cumulative plus project traffic volumes.

### **Intersection Levels of Service**

City staff have determined that the project is not required to analyze any signalized intersections for potential adverse effects since the amount of industrial development proposed for the site (which is located in Edenvale Sub-Area 3) has already been approved as part of the EADP. The project is, however, required to report existing intersection levels of service for informational purposes. The results of the existing intersection level of service analysis (see Table 4) show that all of the signalized study intersections are currently operating at acceptable levels of service during the AM and PM peak hours of traffic. The detailed signalized intersection level of service calculations are contained in Appendix F.



**Table 4**  
**Existing Intersection Levels of Service**

Existing Intersection Levels of Service					
ID	Intersection	Peak Hour	Count Date	Existing	
				Avg. Delay (sec)	LOS
1	Hellyer Ave and Silver Creek Valley Rd	AM	09/27/18	25.8	C
		PM	09/27/18	28.3	C
2	Hellyer Ave and Piercy Rd	AM	10/25/22	15.9	B
		PM	10/25/22	17.4	B
3	Hellyer Ave and Silicon Valley Blvd	AM	10/25/22	22.5	C
		PM	10/25/22	22.6	C
4	US 101 NB Ramps and Bernal Rd-Silicon Valley Blvd	AM	05/03/16	13.7	B
		PM	05/03/16	6.6	B
5	US 101 SB Off-Ramp and Bernal Rd*	AM	10/06/16	16.0	B
		PM	12/13/18	12.3	B
6	SR 85 SB Ramps and Bernal Rd*	AM	10/06/16	15.2	B
		PM	12/13/18	19.1	B
* Denotes VTA CMP intersection					

## Vehicle Queuing Analysis

A vehicle queuing analysis was prepared for selected left-turn movements at intersections where the project would add a noteworthy number of peak hour vehicle trips. This analysis provides a basis for estimating future left-turn pocket storage requirements at the intersections under background plus project conditions. Vehicle queues were estimated using Poisson probability distribution, as described in Chapter 1. The following left-turn movements were evaluated, and the results of the queuing analysis are summarized in Table 5:

- Northbound Hellyer Avenue left turn to Silver Creek Valley Road
- Southbound Hellyer Avenue left turn to Piercy Road
- Eastbound Silicon Valley Boulevard left turn to Hellyer Avenue
- Southbound SR 85 Off-Ramp left turn to Bernal Road
- Westbound Bernal Road left turn to SR 85/US 101 SB On-Ramp
- Southbound US 101 Off-Ramp left turn to Bernal Rd

The queuing analysis indicates that the left-turn storage length from eastbound Silicon Valley Boulevard to Hellyer Avenue would be insufficient in the AM peak hour under background and cumulative conditions and the project would further increase the 95th percentile queue by one vehicle.

### Eastbound Silicon Valley Boulevard Left Turn to Northbound Hellyer Avenue

The available vehicle storage capacity for the left-turn from eastbound Silicon Valley Boulevard to northbound Hellyer Avenue is approximately 12 vehicles per lane (300 feet). The estimated 95th percentile vehicle queues for the left-turn movement are approximately 11 vehicles per lane during the AM peak hour under existing conditions. Thus, currently the left-turn storage is sufficient to accommodate the 95th percentile vehicle queues.

**Table 5**  
**Intersection Vehicle Queuing Analysis Results**

Analysis Scenario	Hellyer Ave & Silver Creek Valley Rd		Hellyer Ave & Piercy Rd		Hellyer Ave & Silicon Valley Blvd		SR 85 SB Ramps & Bernal Rd				US 101 SB Off-Ramp & Bernal Rd	
	NBL		SBL		EBL <sup>2</sup>		SBL+SBR <sup>3</sup>		WBL		SBL	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
<b>Existing</b>												
Cycle (sec)	110	110	104	104	92	92	67	78	67	78	68	44
Volume (vph)	56	105	38	40	494	322	798	1170	73	75	246	192
Number of lanes	2	2	1	1	2	2	3	3	1	1	1	1
Volume (vphpl)	28	53	38	40	247	161	266	390	73	75	246	192
95th % Queue (veh/ln)	3	4	3	3	11	8	9	13	3	4	8	5
95th % Queue <sup>1</sup> (ft/ln)	75	100	75	75	275	200	225	325	75	100	200	125
Storage (ft/ln)	425	425	225	225	300	300	560	560	475	475	575	575
Adequate (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
<b>Background</b>												
Cycle (sec)	110	110	104	104	92	92	67	78	67	78	68	44
Volume (vph)	111	272	38	40	1210	460	1491	984	162	272	364	194
Number of lanes	2	2	1	1	2	2	3	3	1	1	1	1
Volume (vphpl)	56	136	38	40	605	230	497	328	162	272	364	194
95th % Queue (veh/ln)	4	8	3	3	22	10	15	12	6	10	11	5
95th % Queue <sup>1</sup> (ft/ln)	100	200	75	75	550	250	375	300	150	250	275	125
Storage (ft/ln)	425	425	225	225	300	300	560	560	475	475	575	575
Adequate (Y/N)	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
<b>Background Plus Project</b>												
Cycle (sec)	110	110	104	104	92	92	67	78	67	78	68	44
Volume (vph)	116	303	52	42	1249	465	1519	988	167	302	406	200
Number of lanes	2	2	1	1	2	2	3	3	1	1	1	1
Volume (vphpl)	58	152	52	42	625	233	506	329	167	302	406	200
95th % Queue (veh/ln)	4	8	4	3	23	10	15	12	6	11	8	5
95th % Queue <sup>1</sup> (ft/ln)	100	200	100	75	575	250	375	300	150	275	200	125
Storage (ft/ln)	425	425	225	225	300	300	560	560	475	475	575	575
Adequate (Y/N)	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
<b>Cumulative No Project</b>												
Cycle (sec)	110	110	104	104	92	92	67	78	67	78	68	44
Volume (vph)	170	439	160	90	1309	510	1575	1022	178	341	364	194
Number of lanes	2	2	1	1	2	2	3	3	1	1	1	1
Volume (vphpl)	85	220	160	90	655	255	525	341	178	341	364	194
95th % Queue (veh/ln)	5	11	8	5	24	11	15	12	7	12	8	5
95th % Queue <sup>1</sup> (ft/ln)	125	275	200	125	600	275	375	300	175	300	200	125
Storage (ft/ln)	425	425	225	225	300	300	560	560	475	475	575	575
Adequate (Y/N)	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
<b>Cumulative Plus Project</b>												
Cycle (sec)	110	110	104	104	92	92	67	78	67	78	68	44
Volume (vph)	175	470	174	92	1348	515	1603	1026	183	371	406	200
Number of lanes	2	2	1	1	2	2	3	3	1	1	1	1
Volume (vphpl)	87.5	235	174	92	674	257.5	534	342	183	371	406	200
95th % Queue (veh/ln)	6	12	9	6	24	11	15	12	7	13	8	5
95th % Queue <sup>1</sup> (ft/ln)	150	300	225	150	600	275	375	300	175	325	200	125
Storage (ft/ln)	425	425	225	225	300	300	560	560	475	475	575	575
Adequate (Y/N)	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y

**Notes:**

NBL = northbound left-turn movement; SBL = southbound left-turn movement; EBL = eastbound left-turn movement; WBL = westbound left-turn movement; SBR = southbound right-turn movement.

<sup>1</sup> Assumes 25 feet per vehicle queued.

<sup>2</sup> Storage length reflects average of two lanes: inside left-turn pocket (150 feet) and outside left-turn lane (450 feet) from where the change in striping takes place to delineate the trap-left turn lane on Silicon Valley Road.

<sup>3</sup> Storage length reflects average of three lanes: left-turn pocket (300 feet), left/through/right-turn lane (1,080 feet), and right-turn pocket (300 feet).

However, with the EADP, the 95th percentile vehicle queue length would increase to 22 vehicles per lane under background conditions. The project is expected to slightly increase the vehicle queue by one vehicle per lane. Increasing the left-turn storage for this movement is not considered feasible because it would require widening the bridge over the Coyote Creek.

## Freeway Ramp Operations Analysis

The VTA's *TIA Guidelines* recommend a TA include a queuing analysis for freeway on-ramps with existing or planned ramp meters, and off-ramps controlled by signals at junctions with local streets. Therefore, a freeway ramp operations analysis was performed to identify the effects of project traffic on the vehicle queues at the metered on-ramps and the signal-controlled off-ramps at the US 101/Bernal Road and SR 85/Bernal Road interchanges that provide access to the freeway system from the project site. It should be noted that the evaluation of freeway ramps is recommended but not required based on the VTA's *TIA Guidelines*, and there are no adopted methodologies and impact criteria for the analysis of freeway ramps.

Field observations indicate that the SR 85 northbound on-ramp at Bernal Road is metered during the AM peak period. All other on-ramps that provide access from the site are not metered during either peak period, or there were no vehicle queues on these ramps. At the SR 85 northbound on-ramp, the vehicle queue in the mixed-flow lane extends to the end of ramp occasionally during the AM peak period but does not extend onto Bernal Road. The project would add 4 AM peak-hour trips to the on-ramp. The small amount of the project trips is not expected to result in a noticeable increase in the vehicle queue on the ramp.

Table 5 above shows the vehicle queue length for the US 101 southbound off-ramp and SR 85 southbound off-ramp at Bernal Road. The queueing analysis results show that the vehicle queues on the ramps would not extend to the freeway mainline with the project traffic. At the US 101 northbound off-ramp to Bernal Road, the project traffic would make right turns at the foot of the ramp. Field observations show that there is no vehicle queue in the right-turn lane during the peak hours. Therefore, although the project would add 67 trips in the AM peak hour, the increase in vehicle queue is expected to be contained in the right-turn lane.

## Vehicular Site Access and On-Site Circulation

The site access and circulation evaluations are based on the December 29, 2022 site plan prepared by HPA Architecture (see Figure 2 in Chapter 1). Site access was evaluated to determine the adequacy of the site's driveways with regard to the following: traffic volume, geometric design, truck access, and overall operations. On-site vehicular circulation and parking layout were reviewed in accordance with generally accepted traffic engineering standards and transportation planning principles.

### Site Access

Vehicular access to the site would be provided via one full access driveway (north) and one right-turn only driveway (south) on Hellyer Avenue, one full access driveway on Tennant Avenue, and one full access driveway on Piercy Road (see Figure 2). At the northern/western driveway on Hellyer Avenue, the project would remove the existing median to provide a left-turn lane for inbound traffic at the driveway. The southern driveway on Hellyer Avenue would be right turning only due to the median along the project frontage.

Based on the on-site vehicle parking and access to the loading docks, it is expected the driveways on Hellyer Avenue would be used by passenger vehicles and trucks while the driveways on Tennant Avenue and Piercy Road would be used only by passenger vehicles. Both driveways on Hellyer

Avenue would be 45 feet wide and are designed to accommodate large freight trucks (WB-67) turning in and out of the driveways. The driveways on Tennant Avenue and Piercy Road would be 26 feet wide to accommodate passenger vehicles. Figure 14 shows the estimated project trips at the driveways.

Signage should be installed at the Tennant Avenue and Piercy Road driveways to indicate that access at the driveways is limited to employee vehicles only with no truck access.

### **Project Driveway Dimensions**

According to the City of San Jose Department of Transportation (DOT) Geometric Design Guidelines (Addendum Drawing No. R-6), the typical width for a two-way driveway that serves a commercial development is 26 - 32 feet wide. This provides adequate width for vehicular ingress and egress and provides a reasonably short crossing distance for pedestrians. The driveways on Hellyer Avenue are wider than 32 feet for large trucks to access the site.

### **Sight Distance at Driveways**

The project driveways should be free and clear of any obstructions to provide adequate sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and vehicles and bicycles traveling on Hellyer Avenue, Tennant Avenue, and Piercy Road. Any landscaping and signage should be located in such a way to ensure an unobstructed view for drivers exiting the site. Providing the appropriate sight distance reduces the likelihood of a collision at a driveway or intersection and provides drivers with the ability to exit a driveway or locate sufficient gaps in traffic.

The minimum acceptable sight distance is considered the Caltrans stopping sight distance. Sight distance requirements vary depending on roadway speeds. For driveways on Hellyer Avenue, which has a posted speed limit of 45 mph, the Caltrans stopping sight distance is 430 feet (based on a design speed of 50 mph). For driveways on Tennant Avenue and Piercy Road, which has a posted speed limit of 30 mph, the Caltrans stopping sight distance is 250 feet (based on a design speed of 35 mph). Accordingly, a driver must be able to see 430 feet along Hellyer Avenue and 250 feet along Tennant Avenue and Piercy Road in order to stop and avoid a collision. Hellyer Avenue is slightly curved along the project frontage, but the curves would not obstruct the view for exiting vehicles at the driveways. The existing street trees in the median island have a high canopy and would not obstruct the view of drivers turning left into or out of the site to/from southbound Hellyer Avenue. There are no roadway curves on Tennant Avenue and Piercy Road within 250 feet of the driveways that would obstruct the view for exiting vehicles. Therefore, all project driveways would meet the Caltrans stopping sight distance requirement.

According to the site plan, the landscape plan shows street trees would be added along the project frontage. The type and location of the street trees would be determined by the City of San Jose Public Works Department at the implementation stage. The site plan shows the street trees have a high canopy with a minimum height of 6 feet and the landscaping within the vehicle sight triangle at the driveways should be low accent shrubs/groundcover, which would not obstruct the view of drivers exiting the project driveways on Hellyer Avenue, Tennant Avenue, and Piercy Road.

### **Project Driveway Operations**

The project-generated trips that are estimated to occur at the project site are shown in Figure 14. Passenger vehicles and small trucks could use all driveways to access the site while large trucks would be required to use the wider driveways on Hellyer Avenue for ingress and egress.

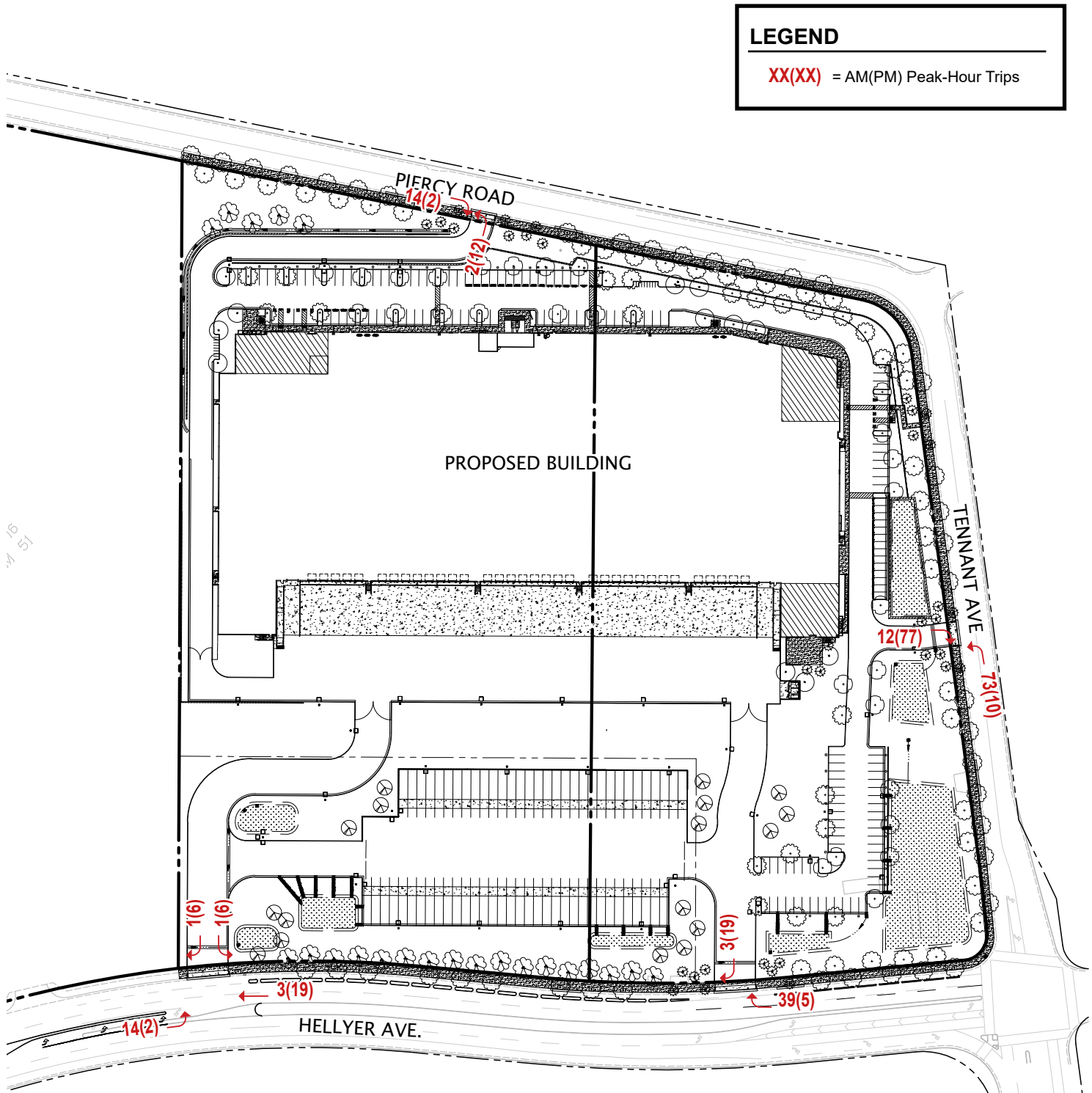


Figure 14  
Gross Project Trips at Driveways

Traffic operations at the northern Hellyer Avenue driveway and Tennant Avenue driveway were evaluated with a vehicle queuing analysis for inbound left-turn traffic and outbound driveway traffic at the driveways (see Table 6). The analysis evaluates whether adequate left-turn storage would be provided for the project's inbound traffic and whether there would be long vehicle queues on site for the outbound traffic. The queueing analysis shows that the 95th percentile queue for inbound left-turn vehicles at the northern Hellyer Avenue driveway would be no more than one vehicle during the AM and PM peak hours. The queue would be well contained within the left-turn storage. At the Tennant Avenue driveway, the inbound left-turn vehicles would result in 95th percentile queue of no more than two vehicles on eastbound Tennant Avenue and would not cause the queue to extend to Hellyer Avenue.

**Table 6**  
**Driveway Queuing Analysis**

Analysis Scenario	Hellyer Avenue Driveway (N)				Tennant Avenue Driveway			
	SBL		WBL/WBR		EBL/EBT <sup>2</sup>		SBR	
	AM	PM	AM	PM	AM	PM	AM	PM
<b>Background Plus Project</b>								
Delay (sec)	10.8	8.5	44.9	31.4	7.5	7.4	8.7	9.0
Volume (vph)	14	2	2	12	162	98	12	77
95th %. Queue (veh/ln)	1	1	1	1	1	1	1	1
95th %. Queue <sup>1</sup> (ft/ln)	25	25	25	25	25	25	25	25
Storage (ft/ln)	140	140	110	110	320	320	90	90
Adequate (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y
<b>Cumulative Plus Project</b>								
Cycle/Delay <sup>1</sup> (sec)	11.4	8.6	53.6	37.3	7.5	7.5	8.7	9.4
Volume (vph)	14	2	2	12	242	109	12	77
95th %. Queue (veh/ln)	1	1	1	1	2	1	1	1
95th %. Queue <sup>2</sup> (ft/ln)	25	25	25	25	50	25	25	25
Storage (ft/ln)	140	140	110	110	320	320	90	90
Adequate (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y
<b>Notes:</b> SB = southbound; WB = westbound; EB = eastbound; L = left turn; T = through; R = right turn. <sup>1</sup> Assumes 25 feet per vehicle queued. <sup>2</sup> Storage length is the distance between the driveway and Hellyer Avenue.								

For the outbound traffic at the project driveways on Hellyer Avenue and Tennant Avenue, the 95th percentile vehicle queue at each driveway is expected to be no more than one vehicle during the AM and PM peak hours. The analysis assumes that the outbound traffic at the northern Hellyer Avenue driveway would all be heavy trucks. The northern Hellyer Avenue driveway and Tennant Avenue driveway have a throat length of 120 feet and 90 feet, respectively, between the face of curb on the street and the closest drive aisle within the parking lot, which could accommodate a vehicle queue of more than three outbound vehicles without blocking access to the drive aisle. Therefore, the outbound vehicle queues are not expected to block the drive aisles.



The southern Hellyer Avenue driveway would be limited to right turns only. Therefore, significant operational issues related to vehicle queueing and vehicle delay for inbound and outbound traffic are not expected to occur at the driveway.

On Piercy Road, inbound and outbound vehicle trips would generally be unimpeded due to the extremely low traffic volumes on this street. Due to the low number of project-generated trips and low traffic volumes on Piercy Road, operational issues related to vehicle queueing and/or delay are not expected to occur at the project driveway.

Developments should provide adequate on-site stacking space for inbound vehicles between the face of curb and any entry gates or on-site drive aisles or parking spaces. This prevents vehicles from queueing onto the street and blocking traffic. According to the site plan, the driveway throat lengths at all driveways would exceed 50 feet. Therefore, adequate on-site stacking space would be provided at the project driveways.

There would be gates provided for the loading dock area and trailer parking area. The gates are located far from the driveways and would not cause on-site vehicle stacking at the driveways. It is expected that the gates on both sides of the loading dock areas would be kept open during business hours.

### **Truck Traffic at Hellyer Avenue Driveway**

To evaluate whether there are adequate gaps for large freight trucks (WB-67) to make left turns out of the northern Hellyer Avenue Driveway, it is assumed that all peak-hour outbound traffic (2 AM peak-hour trips and 12 PM peak-hour trips) at the driveway would be heavy vehicles. TRAFFIX estimates that the level of services would be LOS F and E during the AM and PM peak hours, respectively, under cumulative plus project conditions. TRAFFIX estimates that a gap time of 7.5 seconds would be required on average for heavy vehicles to turn left out of the driveway. Because the HCM definition of heavy vehicles also includes buses and recreational vehicles that may require a shorter gap compared to freight trucks, WB-67 trucks may need a gap of more than 7.5 seconds to exit the site and may experience somewhat longer delay and worse LOS than estimated by TRAFFIX. However, freight trucks typically travel during non-peak hours to avoid congested traffic on nearby freeways used to access the site. The queuing analysis (Table 6) shows that there is sufficient on-site stacking capacity for the outbound traffic, which would have a 95-percentile queue of only one vehicle. Alternatively, freight trucks can avoid the longer delay time associated with turning left out of the site during the peak periods by instead making a right turn onto Hellyer Avenue and accessing southbound US 101 via the Blossom Hill interchange.

### **On-Site Vehicular Circulation and Parking Layout**

On-site vehicular circulation was reviewed for the project in accordance with generally accepted traffic engineering standards and City of San Jose design guidelines. The City's standard minimum width for two-way drive aisles is 26 feet wide where 90-degree parking is provided. This allows sufficient room for vehicles to back out of the parking stalls. According to the site plan, all the two-way drive aisles are shown to be at least 26 feet wide and would provide access to the 90-degree parking stalls throughout the site. The two-way drive aisles that would be utilized by trucks to access the loading docks and the trailer parking stalls would be 40 feet wide to accommodate trucks. The site would provide adequate circulation for drivers with no dead-end aisles.

### **Parking Stall Dimensions**

The City's off-street parking design standard for 90-degree full-size parking stalls is 9 feet wide by 18 feet long. All the standard parking stalls shown on the site plan measure 9 feet wide by 18 feet long, which meets the City's design standard. The accessible ADA stalls also measure 9 feet wide by 18 feet long and include access aisles of 5 feet or more for van accessibility. These stall dimensions would meet ADA standards.

## Truck Access and Circulation

The project site plan was reviewed for truck access using the truck turning-movement template for WB-67 type trucks, which represent the largest semi-trailer trucks that would access the site. Based on the site plan configuration, adequate access would be provided for WB-67 type trucks to enter and exit the site via the driveways on Hellyer Avenue (see Figures 15 and 16). WB-67 trucks would require the full width of the street when exiting the site. However, this situation is common for large trucks. Both driveways on Hellyer Avenue would need to be 45 feet wide, as proposed, to accommodate WB-67 trucks.

Figure 15 shows that large trucks accessing the loading docks would be able to back into and exit the loading docks and circulate through the site without any maneuvering issues.

## Emergency Vehicle Access

The City of San Jose Fire Code requires that all portions of the building be within 150 feet of a fire department access road and requires a minimum 6 feet of clearance from the property line along all sides of the building. The Fire Code also requires driveways to provide at least 20 feet of width for fire access.

According to the project site plan, all areas of the buildings would be within 150 feet of a fire access road (i.e., drive aisle), and at least 6 feet of clearance would be provided around the perimeter of the building. The driveway widths as proposed would be adequate to accommodate emergency vehicles. Therefore, the project would comply with the City's Fire Code requirements.

## Garbage Collection

A trash enclosure would be located on the southside of the loading dock area near the vehicular gate. Garbage collection is expected to occur on site. Since garbage collection would occur on-site, traffic operations along Hellyer Avenue and Piercy Road would not be affected during garbage collection activities.

## Construction Activities

Typical activities related to the construction of any development could include lane narrowing and/or lane closures, sidewalk and pedestrian crosswalk closures, and bike lane closures. In the event of any type of closure, clear signage (e.g., closure and detour signs) must be provided to ensure vehicles, pedestrians and bicyclists are able to adequately reach their intended destinations safely.

Per City standard practice, the project would be required to submit a construction management plan for City approval that addresses demolition, remediation, construction schedule, street closures and/or detours, construction staging areas and parking, and planned truck routes.

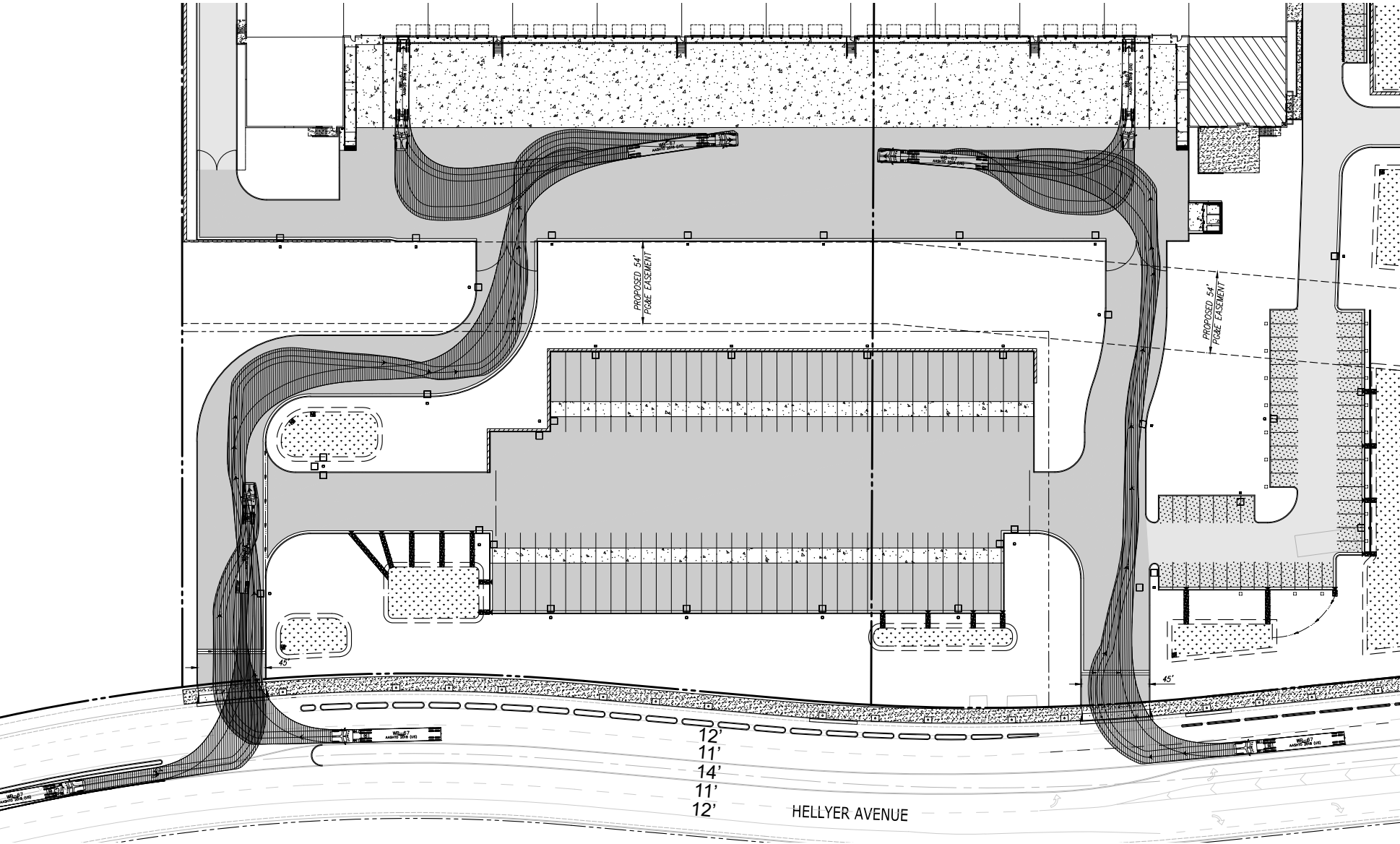


Figure 15  
Freight Truck Turning Plan - Inbound Movements

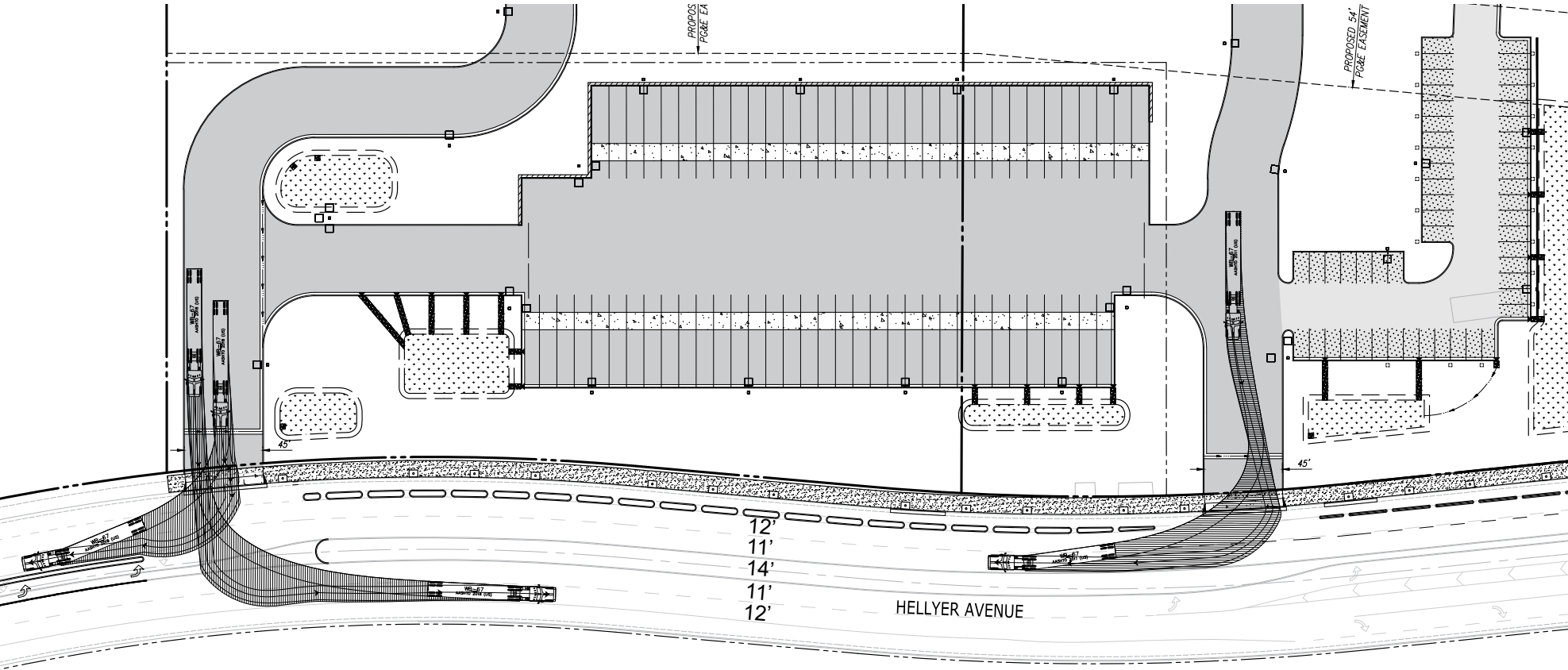


Figure 16  
Freight Truck Turning Plan - Outbound Movements

## Effects on Surrounding Streets

Surrounding local street segments that would be affected by the proposed project are listed below:

- Tennant Avenue between Hellyer Avenue and Piercy Road
- Piercy Road north of Tennant Avenue

Existing and estimated project condition traffic volumes on the surrounding streets were analyzed based on the existing traffic counts conducted in January 2023 and trip estimates for the project (see Table 7). The evaluation consists of a roadway segment analysis to quantify the potential change in traffic volumes along the study roadway segments as a result of the proposed project. For the evaluation, the existing and projected daily traffic volumes along the study roadway segments were compared to acceptable volume thresholds for each roadway segment to determine if the projected change in traffic volume would be significant. Since the City has not established any standards or significance thresholds regarding local streets, the information is presented for information only.

The study roadway segments can be classified as local connector streets given that they serve commercial land uses and connect the surrounding residential land uses to Hellyer Avenue and Silicon Valley Boulevard. The City of San Jose 2040 General Plan describes local connector streets as roadways that have two traffic lanes and would accommodate low to moderate volumes of through traffic.

**Table 7**  
**Average Daily Traffic on Surrounding Streets**

Street Segment	Dir	85th Percentile Speed (mph)	Existing ADT Counts <sup>1</sup>	Project Trips	Existing Plus Project	% Change
Tennant Ave between Hellyer Ave and Project Driveway	EB	43	683	290	973	
	WB	38	615	311	926	
	<b>Total</b>		<b>1,298</b>	<b>601</b>	<b>1,899</b>	<b>46%</b>
Piercy Rd north of Project Driveway	NB	43	515	49	564	
	SB	38	441	56	497	
	<b>Total</b>		<b>956</b>	<b>105</b>	<b>1,061</b>	<b>11%</b>
<b>Notes:</b> ADT = Average Daily Traffic. 1. 24-hour tube counts were conducted on January 25, 2023.						

General guidelines regarding threshold volumes pertaining to connector streets have been recommended within several studies and reference materials, including the *Highway Capacity Manual*. There is variation in these accepted threshold volumes, but in general, connector (or collector) streets' general characteristics include low speeds (25 to 35 miles per hour), low to moderate traffic volumes, and emphasize balance between mobility and access. A connector street is defined by the City of San Jose with ADT volumes typically ranging from 2,000 to 16,000 vehicles.

The 24-hour tube counts conducted in January 2023 showed that the study segments on Tennant Avenue and Piercy Road currently carry approximately 1,300 and 950 vehicles per day, respectively. It was estimated that the project would add 301 and 105 daily trips to Tennant Avenue and Piercy Road, respectively.

Although the projected ADTs are within the acceptable range for this type of street, the added project trips constitute a measurable increase from the existing volumes on Tennant Avenue between Hellyer Avenue and the Tennant Avenue driveway. East of the driveway, the project is not expected to cause a noticeable traffic increase on Tennant Avenue. It is important to note that the project is similar to surrounding land uses in the area, and the project traffic is not considered cut-through traffic given that each of the streets serve as primary access roads to the project site.

Speed surveys conducted along the study segments revealed that the 85th percentile speeds on Tennant Avenue and Piercy Road are 38 – 43 miles per hour (mph), respectively. The posted speed limit on Tennant Avenue is 30 mph. Piercy Road does not have a posted speed limit between Hellyer Avenue and Tennant Avenue. However, based on the posted speed limit on Tennant Avenue, the speed limit is expected to be 30 mph. Based on the collected data, the measured 85th percentile speeds along the street segments are 8 to 13 mph above the speed limit. Speeds within 7 mph of the posted speed limits are considered reasonable. Therefore, based on the speed surveys, it can be concluded that there is a speeding issue along the study segments. As discussed above in Chapter 3, the project would be required to narrow the existing roadway lane widths along Piercy Road and Tennant Avenue to implement Class IV protected bikeways between Hellyer Avenue and Silicon Valley Boulevard. This improvement would provide traffic calming by narrowing lane widths to reduce vehicle travel speed and would deter the non-compliance of street parking occurrences with implementation of bike lanes.

## Effects on Pedestrian, Bicycle, and Transit Facilities

### Pedestrian Facilities

Pedestrian facilities consist of sidewalks and crosswalks in the project vicinity, as well as the Coyote Creek multi-use trail. Crosswalks with pedestrian signal heads and push buttons are located at all the signalized intersections in the study area. According to the site plan, the project would widen the sidewalk with tree wells along the project frontages from 7-feet to 10-feet wide. Within the site, the project would provide a pedestrian walkway between Tennant Avenue and the front door of the building. Pedestrian walkways should be added to also connect the sidewalks along Hellyer Avenue and Piercy Road with building entrances. With this addition, the network of sidewalks and on-site pedestrian walkway would exhibit good connectivity and would provide employees of the project with safe routes to transit stops and other points of interest in the immediate project vicinity.

### Bicycle Facilities

Bicycle facilities in the project vicinity consist of standard or buffered bike lanes (Class II or Class IIB bicycle facilities) on Hellyer Avenue, Silver Creek Valley Road and Monterey Road, as well as the aforementioned Coyote Creek trail (Class I bicycle facility). The project would construct a Class IV protected bike lane along the Hellyer Avenue project frontage per the City of San Jose Better Bike Plan. The project would also be required to install Class IV protected bikeways along Piercy Road and Tennant Avenue between Hellyer Avenue and Silicon Valley Boulevard. The network of bike facilities exhibits good connectivity and would provide employees of the project with safe bicycle routes in the immediate project vicinity.

The project would provide bicycle racks near the entrances to the office areas of the building. The site plan also shows long-term bicycle storage on racks provided within the building. The proposed on-site bike parking would help to create a bicycle-friendly environment and encourage bicycling by employees of the project.



## Transit Facilities

The project site is not well served by bus or rail service. Bus service in the project vicinity is provided by VTA local route 42 only. Route 42 travels along Silver Creek Valley Road, Hellyer Avenue and Silicon Valley Boulevard in the project vicinity and provides service between Evergreen Valley College and Santa Teresa Station. Route 42 runs on 60-minute headways between 6:00 AM and 7:00 PM and provides service to the Blossom Hill Caltrain station via its connection to Rapid Route 568. The Blossom Hill Caltrain Station is located about 2.5 miles from the project site at the intersection of Monterey Road/Ford Road. Local Route 42 has stops on Silicon Valley Boulevard at Eden Park Place approximately 1,300 feet from the project site.

Due to the lack of transit service options within walking distance of the site, it is reasonable to assume that few employees of the project would utilize transit. A small increase in transit demand generated by the proposed project could be accommodated by the current available ridership capacity of the transit service in the study area.

## Parking

The majority of the site would be paved and would include 143 standard parking spaces, 9 ADA-compliant spaces, 66 trailer parking spaces (12 ft x 55 ft), and 34 loading dock spaces.

### Vehicular Parking

Based on the function of the project, 20,000 square feet of the building area would be used as offices for the industrial buildings while the remaining 196,378 square feet would be used for warehousing. According to the City of San Jose's off-street parking requirements (Chapter 20.90, Table 20-190 of the City's Zoning Code), warehouse buildings in excess of 25,000 s.f. of total gross floor area require a minimum of 1 vehicle parking space per 5,000 s.f. of warehouse space and offices require a minimum of 1 vehicle parking space per 250 s.f. of office floor area (85 percent of gross floor area). Accordingly, the project would be required to provide at least 108 vehicle parking spaces (68 spaces for office space and 40 spaces for warehouse).

The site plan shows a total of 152 vehicle parking spaces would be provided, which would exceed the City's vehicle parking requirement.

### Bicycle Parking

According to the City of San Jose's off-street parking requirements (Chapter 20.90 of the City's Zoning Code), non-residential projects must provide a minimum of 2 short-term bicycle parking spaces and 1 long-term bicycle parking space. The project would provide 4 bicycle racks with space for 8 bicycles near the entrances to the building and 10 long-term bicycle parking spaces on racks inside the building to meet City's parking requirement.

## 5. Conclusions

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This report presents the results of the transportation analysis conducted for a proposed industrial development located at 644-675 Piercy Road in San Jose, California. The project site is located within the Edenvale Area Development Policy (EADP) boundaries. The project would construct an industrial building with up to 225,000 square feet and associated vehicle and trailer parking on an approximately 15.92-acre vacant site. Access to the project site would be provided via Hellyer Avenue, Tennant Avenue, and Piercy Road.

This study was conducted for the purpose of identifying the potential transportation impacts related to the proposed industrial project. The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook* (April 2020). Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the *Transportation Analysis Handbook*, the project includes a California Environmental Quality Act (CEQA) level Transportation Analysis (TA) and a non-CEQA Local Transportation Analysis (LTA). The project would generate more than 100 new peak-hour vehicle trips, thus, a Congestion Management Program (CMP) traffic analysis based on the Santa Clara Valley Transportation Authority (VTA) *Transportation Impact Analysis (TIA) Guidelines* (2014) is required.

### CEQA Transportation Impact Analysis

#### Project Vehicle Miles Traveled (VMT) Analysis

The project VMT estimated by the City's VMT Evaluation Tool is 14.80 VMT per worker, which exceeds the industrial threshold (existing regional average) of 14.37 VMT per worker. Since the VMT generated by the project would exceed the threshold of significance for industrial employment uses in the area, the project would result in a significant transportation impact on VMT, and mitigation measures are required to reduce the VMT impact to a less-than-significant level.

#### Project Mitigation

Implementation of the following off-site multimodal infrastructure improvement (Tier 2 VMT reduction strategy) and Tier 4 TDM program would mitigate the significant VMT impact:

- **Traffic Calming Measure and Bike Access Improvement** – The project should narrow the existing roadway lane widths along Piercy Road and Tennant Avenue to implement Class IV protected bikeways with delineator bike buffers in both directions between Hellyer Avenue and Silicon Valley Boulevard/Basking Ridge Avenue.

Project will be required to install plastic bollard delineators along the following segments:

- Along both sides of Piercy Road from Hellyer Avenue to the start of the 550 Piercy Road project frontage.
- Along the east side of Piercy Road from the start of the 550 Piercy Road project frontage to Tennant Avenue.
- Along the south side of Tennant Avenue from Piercy Road to Hellyer Avenue-Basking Ridge Avenue.
- **Commute Trip Reduction Marketing and Education** – The project should implement a marketing campaign targeting all employees that encourages the use of shared rides and active modes of transportation. Marketing strategies may include new employee orientation on alternative commute options, event promotions, publications, and electronic (email) communications. The project should provide information and encouragement to use transit services, shared ride modes (i.e., carpooling), and active modes to reduce drive-alone commute trips and, thus, VMT. It is assumed that 100 percent of the project employees would participate in the commute trip reduction marketing and education program.

Based on the City's VMT Evaluation Tool, implementing the above recommended mitigation measures would lower the project VMT to 13.93 per worker, which would reduce the project impact to a less-than-significant level (below the industrial threshold of 14.37 VMT per worker).

### Cumulative VMT Impact Analysis

The proposed industrial project is consistent with the uses allowed within the *Industrial Park* (IP) land use designation and is consistent with the following City of San Jose Land Use Policies:

- Land Use Policy LU-6.4: Encourage the development of new industrial areas and the redevelopment of existing older or marginal industrial areas with new industrial uses, particularly in locations which facilitate efficient commute patterns.
- Land Use Policy LU-6.5: Maintain and create Light Industrial and Heavy Industrial designated sites that are at least one acre in size in order to facilitate viable industrial uses.
- Land Use Policy LU-7.1: Encourage industrial supplier/service business retention and expansion in appropriate areas in the City.

The proposed project is consistent with the Envision San Jose 2040 General Plan and would not require a General Plan Amendment (GPA). The construction of new industrial buildings would facilitate the development of an industrial site and would help retain industrial designated land within the City. Thus, the project would be considered part of the cumulative solution to meet the General Plan's long-range transportation goals and would result in a less-than-significant cumulative impact.

## Local Transportation Analysis

### Edenvale Area Development Policy Conformance

The project is required to be in conformance with the maximum allowable floor area ratio (FAR) for Edenvale Sub-Area 3 development, which is a maximum FAR of 0.40 for industrial development. The project would construct 225,000 square feet of building floor area on the 15.92-acre site, so the project FAR would be 0.32 and would be lower than the maximum allowable FAR of 0.40. Thus, the proposed project density is in conformance with the EADP.

## Project Trip Generation

After applying the ITE trip rates to the proposed project and applying the appropriate trip reductions, it is estimated that the project would generate 1,041 new daily trips, with 159 new trips (140 inbound and 19 outbound) occurring during the AM peak hour and 139 new trips (19 inbound and 120 outbound) occurring during the PM peak hour.

## Intersection Traffic Operations

The results of the intersection level of service evaluation show that all of the signalized study intersections are currently operating at acceptable levels of service during the AM and PM peak hours of traffic.

The project site is located in Edenvale Sub-Area 3, which means the site already has approval for industrial development as part of the EADP. Therefore, the project is not required to analyze any signalized intersections for potential adverse effects.

## Other Transportation Items

The proposed site plan shows adequate site access and on-site circulation for automobiles and trucks (including emergency vehicles), and no adverse traffic operational issues are expected to occur at the project driveways as a result of the project. The project would not have an adverse effect on the existing pedestrian or bicycle facilities in the study area. Hexagon has the following recommendation resulting from the evaluation of site access and pedestrian facilities.

## Recommendations

- Signage should be installed at the Tennant Avenue and Piercy Road driveways to indicate that access at the driveways is limited to employee vehicles only with no truck access.
- Pedestrian walkways/paths should be provided on site to connect the sidewalks along Hellyer Avenue and Piercy Road with building entrances.

**Appendix A**  
**VMT Evaluation Tool Summary Reports**

# CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

## PROJECT:

Name: 644 & 675 Piercy Rd Industrial - No Mit Tool Version: 2/29/2019  
 Location: 644 & 675 Piercy Rd Date: 9/8/2022  
 Parcel: 67808055 Parcel Type: Suburb with Single-Family Homes  
 Proposed Parking Spaces Vehicles: 244 Bicycles: 0

## LAND USE:

Residential:		Percent of All Residential Units	
Single Family	0 DU	Extremely Low Income ( $\leq$ 30% MFI)	0 % Affordable
Multi Family	0 DU	Very Low Income ( $>$ 30% MFI, $\leq$ 50% MFI)	0 % Affordable
Subtotal	0 DU	Low Income ( $>$ 50% MFI, $\leq$ 80% MFI)	0 % Affordable
Office:	0 KSF		
Retail:	0 KSF		
Industrial:	225 KSF		

## VMT REDUCTION STRATEGIES

### Tier 1 - Project Characteristics

Increase Residential Density	
Existing Density (DU/Residential Acres in half-mile buffer) . . . . .	4
With Project Density (DU/Residential Acres in half-mile buffer) . . . . .	4
Increase Development Diversity	
Existing Activity Mix Index . . . . .	0.87
With Project Activity Mix Index . . . . .	0.87
Integrate Affordable and Below Market Rate	
Extremely Low Income BMR units . . . . .	0 %
Very Low Income BMR units . . . . .	0 %
Low Income BMR units . . . . .	0 %
Increase Employment Density	
Existing Density (Jobs/Commercial Acres in half-mile buffer) . . . . .	20
With Project Density (Jobs/Commercial Acres in half-mile buffer) . . . . .	24

### Tier 2 - Multimodal Infrastructure

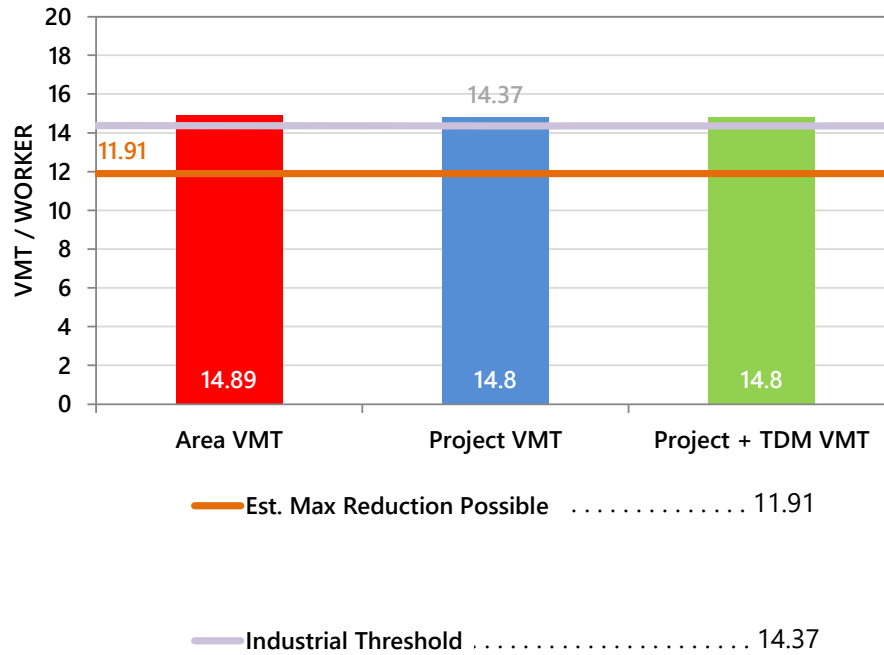
### Tier 3 - Parking

### Tier 4 - TDM Programs



## EMPLOYMENT ONLY

The tool estimates that the project would generate per non-industrial worker VMT and per industrial worker VMT above the City's threshold.



# CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

## PROJECT:

Name: 644 & 675 Piercy Rd Industrial\_w/ Mitigation Tool Version: 2/29/2019  
 Location: 644 & 675 Piercy Rd Date: 3/17/2023  
 Parcel: 67808055 Parcel Type: Suburb with Single-Family Homes  
 Proposed Parking Spaces Vehicles: 244 Bicycles: 0

## LAND USE:

Residential:	Percent of All Residential Units		
Single Family	0 DU	Extremely Low Income ( ≤ 30% MFI)	0 % Affordable
Multi Family	0 DU	Very Low Income ( > 30% MFI, ≤ 50% MFI)	0 % Affordable
Subtotal	0 DU	Low Income ( > 50% MFI, ≤ 80% MFI)	0 % Affordable
Office:	0 KSF		
Retail:	0 KSF		
Industrial:	225 KSF		

## VMT REDUCTION STRATEGIES

### Tier 1 - Project Characteristics

Increase Residential Density	
Existing Density (DU/Residential Acres in half-mile buffer) . . . . .	4
With Project Density (DU/Residential Acres in half-mile buffer) . . . . .	4
Increase Development Diversity	
Existing Activity Mix Index . . . . .	0.87
With Project Activity Mix Index . . . . .	0.87
Integrate Affordable and Below Market Rate	
Extremely Low Income BMR units . . . . .	0 %
Very Low Income BMR units . . . . .	0 %
Low Income BMR units . . . . .	0 %
Increase Employment Density	
Existing Density (Jobs/Commercial Acres in half-mile buffer) . . . . .	20
With Project Density (Jobs/Commercial Acres in half-mile buffer) . . . . .	24

### Tier 2 - Multimodal Infrastructure

Pedestrian Network Improvements *(In Coordination with SJ)*  
 Are pedestrian improvements provided beyond the development frontage? . . . . . Yes

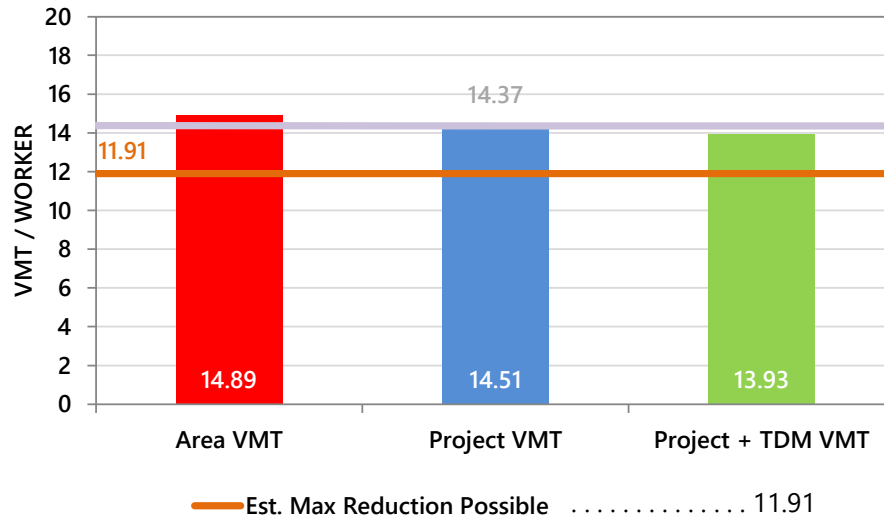
### Tier 3 - Parking

### Tier 4 - TDM Programs

Commute Trip Reduction Marketing/ Education	
Percent of Eligible Employees . . . . .	100 %

## EMPLOYMENT ONLY

The tool estimates that the project would generate per non-industrial worker VMT below the City's threshold. There are selected strategies that require coordination with the City of San Jose to implement.



## **Appendix B**

### **Intersection Volumes**

Intersection Number: **1**  
 Traffic Node Number: 3848  
 Intersection Name: Hellyer Ave and Silver Creek Valley Rd  
 Peak Hour: AM  
 Count Date: 09/27/18  
 Date of Analysis: 11/03/22

Movements													
Scenario	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	27	27	21	100	483	171	186	148	56	97	430	165	1911
Approved Project Trips													
CSJ ATI	63	140	4	19	587	98	23	51	55	159	145	192	1536
Total Approved Trips	63	140	4	19	587	98	23	51	55	159	145	192	1536
Background Conditions	90	167	25	119	1070	269	209	199	111	256	575	357	3447
Proposed Project Trips	0	0	0	0	0	7	1	0	5	21	0	0	34
Background + Project Conditions	90	167	25	119	1070	276	210	199	116	277	575	357	3481
Pending Project Trips													
550 Piercy Rd	0	0	0	0	0	13	2	0	16	120	0	0	151
Total Pending Trips	0	0	0	0	0	13	2	0	16	120	0	0	151
Cumulative No Project Conditions	90	167	25	119	1070	282	211	199	127	376	575	357	3598
Cumulative + Project Conditions	90	167	25	119	1070	289	212	199	132	397	575	357	3632

Intersection Number: **2**  
 Traffic Node Number: 3949  
 Intersection Name: Hellyer Ave and Piercy Rd  
 Peak Hour: AM  
 Count Date: 10/25/22  
 Date of Analysis: 11/03/22

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	20	207	38	16	7	1	7	561	82	33	5	20	997
Approved Project Trips													
CSJ ATI	85	232	0	0	12	0	0	124	110	40	48	19	670
Total Approved Trips	85	232	0	0	12	0	0	124	110	40	48	19	670
Background Conditions	105	439	38	16	19	1	7	685	192	73	53	39	1667
Proposed Project Trips	0	14	14	2	0	0	0	4	0	0	0	0	34
Background + Project Conditions	105	453	52	18	19	1	7	689	192	73	53	39	1701
Pending Project Trips													
550 Piercy Rd	0	53	80	11	0	0	0	7	0	0	0	0	151
Total Pending Trips	0	53	80	11	0	0	0	7	0	0	0	0	151
Cumulative No Project Conditions	105	492	118	27	19	1	7	692	192	73	53	39	1818
Cumulative + Project Conditions	105	506	132	29	19	1	7	696	192	73	53	39	1852

Intersection Number: **3**  
 Traffic Node Number: 3919  
 Intersection Name: Hellyer Ave and Silicon Valley Blvd  
 Peak Hour: AM  
 Count Date: 10/25/22

Date of Analysis: 11/03/22

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	163	77	0	2	21	8	7	123	426	290	20	494	1631
Approved Project Trips													
CSJ ATI	233	1	0	0	40	0	0	9	-43	-11	62	716	1007
Total Approved Trips	233	1	0	0	40	0	0	9	-43	-11	62	716	1007
Background Conditions	396	78	0	2	61	8	7	132	383	279	82	1210	2638
Proposed Project Trips	1	0	0	0	12	0	0	0	0	0	73	39	125
Background + Project Conditions	397	78	0	2	73	8	7	132	383	279	155	1249	2763
Pending Project Trips													
550 Piercy Rd	7	0	0	0	11	0	0	0	0	0	80	53	151
Total Pending Trips	7	0	0	0	11	0	0	0	0	0	80	53	151
Cumulative No Project Conditions	403	78	0	2	72	8	7	132	383	279	162	1263	2789
Cumulative + Project Conditions	404	78	0	2	84	8	7	132	383	279	235	1302	2914

Intersection Number: **4**  
 Traffic Node Number: 3860  
 Intersection Name: US 101 NB Ramps and Bernal Rd-Silicon Valley Blvd  
 Peak Hour: AM  
 Count Date: 05/03/16

Date of Analysis: 11/03/22

Movements														
Scenario	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	0	0	0	167	680	0	167	0	680	426	1085	8	3213	
Approved Project Trips														
CSJ ATI	0	0	0	0	287	0	202	0	444	0	644	0	1577	
Total Approved Trips	0	0	0	0	287	0	202	0	444	0	644	0	1577	
Background Conditions	0	0	0	167	967	0	369	0	1124	426	1729	8	4790	
Proposed Project Trips	0	0	0	0	10	0	35	0	0	0	77	0	122	
Background + Project Conditions	0	0	0	167	977	0	404	0	1124	426	1806	8	4912	
Pending Project Trips														
550 Piercy Rd	0	0	0	0	18	0	67	0	0	0	67	0	152	
Total Pending Trips	0	0	0	0	18	0	67	0	0	0	67	0	152	
Cumulative No Project Conditions	0	0	0	167	985	0	436	0	1124	426	1796	8	4942	
Cumulative + Project Conditions	0	0	0	167	995	0	471	0	1124	426	1873	8	5064	



Intersection Number: **5**  
 Traffic Node Number: 3017  
 Intersection Name: US 101 SB Off-Ramp and Bernal Rd\*  
 Peak Hour: AM  
 Count Date: 10/06/16  
 Date of Analysis: 11/03/22

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	960	0	246	0	1128	0	0	0	0	0	1196	0	3530
Approved Project Trips													
CSJ ATI	517	0	118	0	702	0	0	0	0	0	397	0	1734
Total Approved Trips	517	0	118	0	702	0	0	0	0	0	397	0	1734
Background Conditions	1477	0	364	0	1830	0	0	0	0	0	1593	0	5264
Proposed Project Trips	0	0	42	0	10	0	0	0	0	0	35	0	87
Background + Project Conditions	1477	0	406	0	1840	0	0	0	0	0	1628	0	5351
Pending Project Trips													
550 Piercy Rd	0	0	0	0	18	0	0	0	0	0	67	0	85
Total Pending Trips	0	0	0	0	18	0	0	0	0	0	67	0	85
Cumulative No Project Conditions	1477	0	364	0	1848	0	0	0	0	0	1660	0	5349
Cumulative + Project Conditions	1477	0	406	0	1858	0	0	0	0	0	1695	0	5436

Intersection Number: **6**  
 Traffic Node Number: 3003  
 Intersection Name: SR 85 SB Ramps and Bernal Rd\*  
 Peak Hour: AM  
 Count Date: 10/06/16  
 Date of Analysis: 11/03/22

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	290	1	507	0	1478	73	0	0	0	97	1201	0	3647
Approved Project Trips													
CSJ ATI	392	0	301	0	1088	89	0	0	0	136	40	0	2046
Total Approved Trips	392	0	301	0	1088	89	0	0	0	136	40	0	2046
Background Conditions	682	1	808	0	2566	162	0	0	0	233	1241	0	5693
Proposed Project Trips	0	0	28	0	1	5	0	0	0	0	7	0	41
Background + Project Conditions	682	1	836	0	2567	167	0	0	0	233	1248	0	5734
Pending Project Trips													
550 Piercy Rd	0	0	53	0	2	9	0	0	0	0	13	0	77
Total Pending Trips	0	0	53	0	2	9	0	0	0	0	13	0	77
Cumulative No Project Conditions	682	1	861	0	2568	171	0	0	0	233	1254	0	5770
Cumulative + Project Conditions	682	1	889	0	2569	176	0	0	0	233	1261	0	5811

Intersection Number: **1**  
 Traffic Node Number: 3848  
 Intersection Name: Hellyer Ave and Silver Creek Valley Rd  
 Peak Hour: PM  
 Count Date: 09/27/18  
 Date of Analysis: 11/03/22

Movements														
Scenario	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	128	111	64	67	331	146	272	92	105	68	520	103	2007	
Approved Project Trips														
CSJ ATI	198	31	18	2	111	9	99	137	167	20	579	26	1397	
Total Approved Trips	198	31	18	2	111	9	99	137	167	20	579	26	1397	
Background Conditions	326	142	82	69	442	155	371	229	272	88	1099	129	3404	
Proposed Project Trips	0	0	0	0	0	1	6	0	31	3	0	0	41	
Background + Project Conditions	326	142	82	69	442	156	377	229	303	91	1099	129	3445	
Pending Project Trips														
550 Piercy Rd	0	0	0	0	0	2	11	0	103	17	0	0	133	
Total Pending Trips	0	0	0	0	0	2	11	0	103	17	0	0	133	
Cumulative No Project Conditions	326	142	82	69	442	157	382	229	375	105	1099	129	3537	
Cumulative + Project Conditions	326	142	82	69	442	158	388	229	406	108	1099	129	3578	

Intersection Number: **2**  
 Traffic Node Number: 3949  
 Intersection Name: Hellyer Ave and Piercy Rd  
 Peak Hour: PM  
 Count Date: 10/25/22  
 Date of Analysis: 11/03/22

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	23	429	40	21	5	4	4	289	14	71	10	28	938
Approved Project Trips													
CSJ ATI	0	27	0	0	48	0	0	217	27	110	0	0	429
Total Approved Trips	0	27	0	0	48	0	0	217	27	110	0	0	429
Background Conditions	23	456	40	21	53	4	4	506	41	181	10	28	1367
Proposed Project Trips	0	2	2	12	0	0	0	25	0	0	0	0	41
Background + Project Conditions	23	458	42	33	53	4	4	531	41	181	10	28	1408
Pending Project Trips													
550 Piercy Rd	0	7	11	69	0	0	0	46	0	0	0	0	133
Total Pending Trips	0	7	11	69	0	0	0	46	0	0	0	0	133
Cumulative No Project Conditions	23	463	51	90	53	4	4	552	41	181	10	28	1500
Cumulative + Project Conditions	23	465	53	102	53	4	4	577	41	181	10	28	1541

Intersection Number: **3**  
 Traffic Node Number: 3919  
 Intersection Name: Hellyer Ave and Silicon Valley Blvd  
 Peak Hour: PM  
 Count Date: 10/25/22  
 Date of Analysis: 11/03/22

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	383	38	5	2	27	4	4	26	176	264	47	322	1298
Approved Project Trips													
CSJ ATI	698	9	0	0	58	0	0	0	-5	-42	32	138	888
Total Approved Trips	698	9	0	0	58	0	0	0	-5	-42	32	138	888
Background Conditions	1081	47	5	2	85	4	4	26	171	222	79	460	2186
Proposed Project Trips	6	0	0	0	77	0	0	0	0	0	10	5	98
Background + Project Conditions	1087	47	5	2	162	4	4	26	171	222	89	465	2284
Pending Project Trips													
550 Piercy Rd	46	0	0	0	69	0	0	0	0	0	11	7	133
Total Pending Trips	46	0	0	0	69	0	0	0	0	0	11	7	133
Cumulative No Project Conditions	1127	47	5	2	154	4	4	26	171	222	90	467	2319
Cumulative + Project Conditions	1133	47	5	2	231	4	4	26	171	222	100	472	2417

Intersection Number: **4**  
 Traffic Node Number: 3860  
 Intersection Name: US 101 NB Ramps and Bernal Rd-Silicon Valley Blvd  
 Peak Hour: PM  
 Count Date: 05/03/16  
 Date of Analysis: 11/03/22

Movements														
Scenario	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	0	0	0	242	740	0	69	0	84	789	772	20	2716	
Approved Project Trips														
CSJ ATI	0	0	0	0	836	0	62	0	73	0	87	0	1058	
Total Approved Trips	0	0	0	0	836	0	62	0	73	0	87	0	1058	
Background Conditions	0	0	0	242	1576	0	131	0	157	789	859	20	3774	
Proposed Project Trips	0	0	0	0	60	0	5	0	0	0	10	0	75	
Background + Project Conditions	0	0	0	242	1636	0	136	0	157	789	869	20	3849	
Pending Project Trips														
550 Piercy Rd	0	0	0	0	115	0	9	0	0	0	9	0	133	
Total Pending Trips	0	0	0	0	115	0	9	0	0	0	9	0	133	
Cumulative No Project Conditions	0	0	0	242	1691	0	140	0	157	789	868	20	3907	
Cumulative + Project Conditions	0	0	0	242	1751	0	145	0	157	789	878	20	3982	

Intersection Number: **5**  
 Traffic Node Number: 3017  
 Intersection Name: US 101 SB Off-Ramp and Bernal Rd\*  
 Peak Hour: PM  
 Count Date: 12/13/18

Date of Analysis: 11/03/22

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	689	0	192	0	803	0	0	0	0	0	1884	0	3568
Approved Project Trips													
CSJ ATI	-167	0	2	0	790	0	0	0	0	0	634	0	1259
Total Approved Trips	-167	0	2	0	790	0	0	0	0	0	634	0	1259
Background Conditions	522	0	194	0	1593	0	0	0	0	0	2518	0	4827
Proposed Project Trips	0	0	6	0	60	0	0	0	0	0	5	0	71
Background + Project Conditions	522	0	200	0	1653	0	0	0	0	0	2523	0	4898
Pending Project Trips													
550 Piercy Rd	0	0	0	0	115	0	0	0	0	0	9	0	124
Total Pending Trips	0	0	0	0	115	0	0	0	0	0	9	0	124
Cumulative No Project Conditions	522	0	194	0	1708	0	0	0	0	0	2527	0	4951
Cumulative + Project Conditions	522	0	200	0	1768	0	0	0	0	0	2532	0	5022

Intersection Number: **6**  
 Traffic Node Number: 3003  
 Intersection Name: SR 85 SB Ramps and Bernal Rd\*  
 Peak Hour: PM  
 Count Date: 12/13/18

Date of Analysis: 11/03/22

Scenario	Movements												Total
	Southbound Approach			Westbound Approach			Northbound Approach			Eastbound Approach			
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Conditions	662	1	507	0	1077	75	0	0	0	145	1392	0	3859
Approved Project Trips													
CSJ ATI	-189	0	3	0	127	197	0	0	0	439	1074	0	1651
Total Approved Trips	-189	0	3	0	127	197	0	0	0	439	1074	0	1651
Background Conditions	473	1	510	0	1204	272	0	0	0	584	2466	0	5510
Proposed Project Trips	0	0	4	0	6	30	0	0	0	0	1	0	41
Background + Project Conditions	473	1	514	0	1210	302	0	0	0	584	2467	0	5551
Pending Project Trips													
550 Piercy Rd	0	0	7	0	11	57	0	0	0	0	2	0	77
Total Pending Trips	0	0	7	0	11	57	0	0	0	0	2	0	77
Cumulative No Project Conditions	473	1	517	0	1215	329	0	0	0	584	2468	0	5587
Cumulative + Project Conditions	473	1	521	0	1221	359	0	0	0	584	2469	0	5628

## **Appendix C**

### **Intersection Turning Movement Counts**



(303) 216-2439  
www.alltrafficdata.net

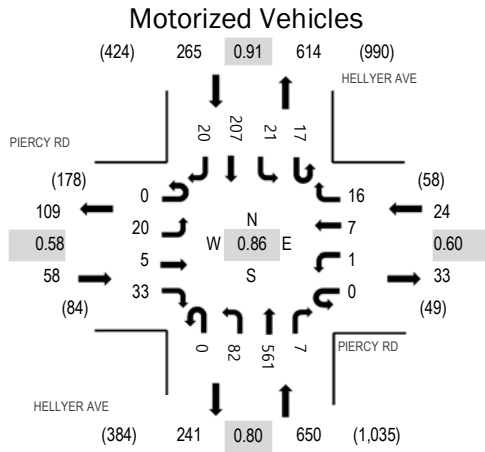
**Location:** 2 HELLYER AVE & PIERCY RD AM

**Date:** Tuesday, October 25, 2022

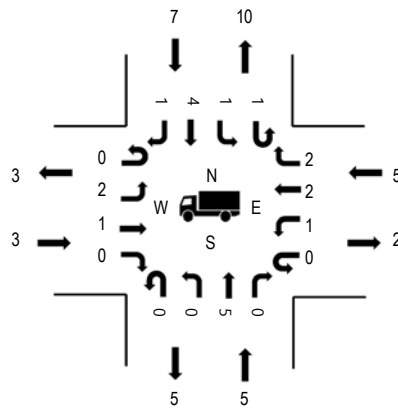
**Peak Hour:** 07:40 AM - 08:40 AM

**Peak 15-Minutes:** 07:40 AM - 07:55 AM

## Peak Hour



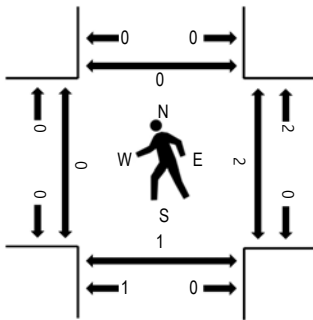
## Heavy Vehicles



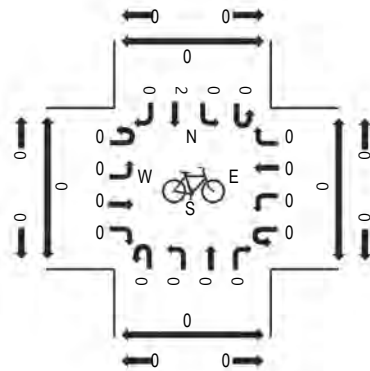
	HV%	PHF
EB	5.2%	0.58
WB	20.8%	0.60
NB	0.8%	0.80
SB	2.6%	0.91
All	2.0%	0.86

Note: Total study counts contained in parentheses.

## Pedestrians



## Bicycles on Road





Traffic Counts - Motorized Vehicles

Interval Start Time	HELLYER AVE Northbound				PIERCY RD Eastbound				HELLYER AVE Southbound				PIERCY RD Westbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	2	11	0	0	0	1	1	0	0	4	2	0	0	0	1	22	705
7:05 AM	0	5	13	0	0	1	0	0	0	0	3	1	0	0	1	3	27	769
7:10 AM	0	4	13	0	0	0	0	1	0	0	10	0	0	1	1	0	30	820
7:15 AM	0	1	24	0	0	0	0	1	0	0	16	0	0	0	1	1	44	884
7:20 AM	0	3	27	0	0	2	1	0	0	1	3	2	0	0	0	0	39	939
7:25 AM	0	1	32	1	0	1	0	1	1	2	8	0	0	1	3	5	56	963
7:30 AM	0	4	32	0	0	0	0	0	0	1	14	1	0	0	2	2	56	987
7:35 AM	0	4	38	0	0	2	0	1	0	0	15	0	0	1	2	1	64	993
7:40 AM	0	2	51	1	0	0	2	3	0	1	15	3	0	0	1	4	83	997
7:45 AM	0	5	62	0	0	0	0	2	1	3	18	0	0	0	1	3	95	984
7:50 AM	0	7	73	1	0	1	0	2	1	1	22	1	0	0	1	1	111	966
7:55 AM	0	9	43	0	0	0	0	1	4	0	18	2	0	0	1	0	78	915 896
8:00 AM	0	3	43	2	0	3	0	6	1	1	21	2	0	0	1	3	86	
8:05 AM	0	6	41	1	0	2	1	6	0	4	16	0	0	0	0	1	78	
8:10 AM	0	13	44	1	0	3	0	5	0	3	24	0	0	0	1	0	94	
8:15 AM	0	10	53	0	0	2	2	2	1	4	22	0	0	0	1	2	99	
8:20 AM	0	7	35	0	0	0	0	2	3	2	13	1	0	0	0	0	63	
8:25 AM	0	5	45	1	0	5	0	1	2	0	17	3	0	0	0	1	80	
8:30 AM	0	8	27	0	0	2	0	1	2	2	14	4	0	1	0	1	62	
8:35 AM	0	7	44	0	0	2	0	2	2	0	7	4	0	0	0	0	68	
8:40 AM	0	3	38	0	0	2	1	1	2	2	16	3	0	0	1	1	70	
8:45 AM	0	4	46	1	0	0	1	2	0	2	17	1	0	0	0	3	77	
8:50 AM	0	5	39	0	0	2	0	0	1	0	9	2	0	0	0	2	60	
8:55 AM	0	7	27	0	0	1	0	3	1	2	14	3	0	0	0	1	59	
Count Total	0	125	901	9	0	31	9	44	22	31	336	35	0	4	18	36	1,601	
Peak Hour	0	82	561	7	0	20	5	33	17	21	207	20	0	1	7	16	997	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	NB	EB	SB	WB	Total		NB	EB	SB	WB	Total		NB	EB	SB	WB	Total
7:00 AM	1	0	1	0	2	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	0	1	0	1	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	1	0	1	0	2	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	0	2	0	2	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	1	0	0	1	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	2	1	1	3	7	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	1	2	1	0	4	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	1	0	1	0	2	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	0	1	1	2	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	0	1	0	1	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	0	1	0	1	7:55 AM	0	0	1	0	1	7:55 AM	0	0	0	0	0
8:00 AM	0	1	0	0	1	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	1	0	1	2	8:05 AM	0	0	1	0	1	8:05 AM	0	0	0	0	0
8:10 AM	1	0	2	1	4	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	1	1	0	1	3	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	1	0	0	0	1	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	0	1	1	2	8:30 AM	0	0	0	0	0	8:30 AM	1	0	0	1	2
8:35 AM	1	0	0	0	1	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	1	1
8:40 AM	0	0	1	0	1	8:40 AM	0	0	0	0	0	8:40 AM	1	0	0	0	1
8:45 AM	1	0	0	1	2	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	1	0	1	2	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	0	0
Count Total	11	8	15	10	44	Count Total	0	0	2	0	2	Count Total	2	0	0	2	4
Peak Hour	5	3	7	5	20	Peak Hour	0	0	2	0	2	Peak Hour	1	0	0	2	3



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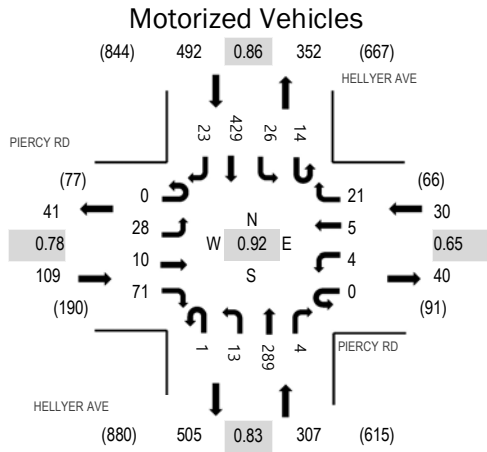
**Location:** 2 HELLYER AVE & PIERCY RD PM

**Date:** Tuesday, October 25, 2022

**Peak Hour:** 04:20 PM - 05:20 PM

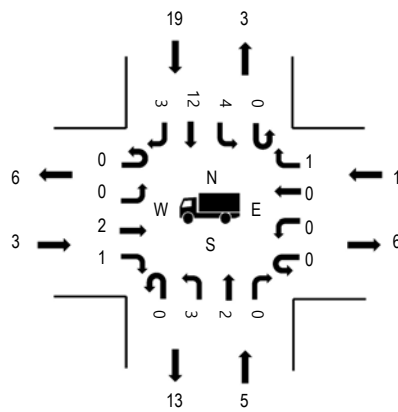
**Peak 15-Minutes:** 04:35 PM - 04:50 PM

## Peak Hour



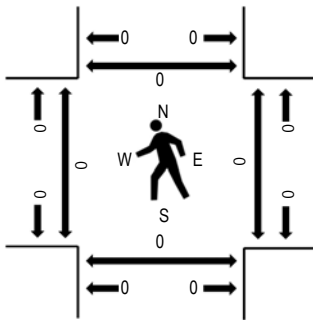
Note: Total study counts contained in parentheses.

## Heavy Vehicles

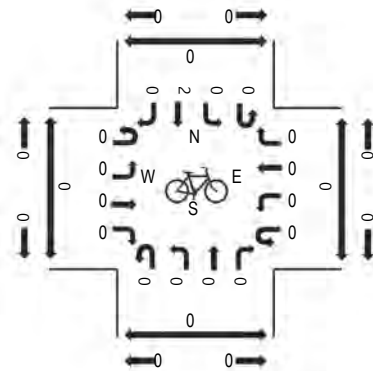


	HV%	PHF
EB	2.8%	0.78
WB	3.3%	0.65
NB	1.6%	0.83
SB	3.9%	0.86
All	3.0%	0.92

## Pedestrians



## Bicycles on Road



Traffic Counts - Motorized Vehicles

Interval Start Time	HELLYER AVE Northbound				PIERCY RD Eastbound				HELLYER AVE Southbound				PIERCY RD Westbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	32	0	0	2	2	13	0	3	33	3	0	0	2	1	91	915
4:05 PM	0	2	22	0	0	1	2	6	1	2	32	0	0	3	2	2	75	909
4:10 PM	0	1	12	5	0	1	1	5	2	1	32	3	0	1	0	2	66	917
4:15 PM	0	0	18	0	0	0	0	2	2	2	35	3	0	1	0	1	64	927
4:20 PM	0	1	27	0	0	2	0	10	2	1	33	1	0	0	1	4	82	938
4:25 PM	0	0	21	1	0	1	0	6	1	3	43	2	0	0	0	2	80	926
4:30 PM	0	5	19	0	0	3	0	1	3	3	22	3	0	0	0	1	60	922
4:35 PM	0	1	26	0	0	2	0	4	1	4	49	3	0	1	1	3	95	932
4:40 PM	0	0	25	0	0	3	1	8	3	0	38	1	0	0	0	1	80	906
4:45 PM	0	1	22	0	0	3	0	6	1	3	39	2	0	1	0	2	80	892
4:50 PM	0	0	22	2	0	4	0	7	0	5	26	1	0	1	0	0	68	860
4:55 PM	0	1	23	0	0	0	0	7	2	0	36	4	0	0	0	1	74	829
5:00 PM	0	3	23	1	0	6	3	8	1	2	32	4	0	0	1	1	85	800
5:05 PM	1	0	30	0	0	1	4	3	0	2	36	0	0	1	1	4	83	
5:10 PM	0	1	27	0	0	1	0	6	0	3	35	1	0	0	0	2	76	
5:15 PM	0	0	24	0	0	2	2	5	0	0	40	1	0	0	1	0	75	
5:20 PM	0	2	40	0	0	0	2	3	1	1	18	1	0	0	0	2	70	
5:25 PM	0	0	29	2	0	0	1	3	1	5	27	0	0	4	3	1	76	
5:30 PM	0	3	28	2	0	2	0	8	0	3	22	2	0	0	0	0	70	
5:35 PM	0	1	36	2	0	1	4	1	0	2	20	0	0	1	0	1	69	
5:40 PM	0	1	24	0	0	0	1	5	0	1	32	1	0	0	0	1	66	
5:45 PM	0	0	18	1	0	0	0	1	0	1	25	0	0	0	1	1	48	
5:50 PM	0	0	10	0	0	2	2	5	1	1	14	0	0	1	0	1	37	
5:55 PM	0	4	12	1	0	1	0	4	0	1	17	1	0	1	0	3	45	
Count Total	1	27	570	17	0	38	25	127	22	49	736	37	0	16	13	37	1,715	
Peak Hour	1	13	289	4	0	28	10	71	14	26	429	23	0	4	5	21	938	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	NB	EB	SB	WB	Total		NB	EB	SB	WB	Total		NB	EB	SB	WB	Total
4:00 PM	2	2	3	0	7	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	1	2	0	0	3	4:05 PM	1	0	0	0	1	4:05 PM	0	0	0	0	0
4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	1	0	2	0	3	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	1	0	1	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	1	0	5	0	6	4:30 PM	0	0	2	0	2	4:30 PM	0	0	0	0	0
4:35 PM	1	0	3	1	5	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	1	1	0	2	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	2	0	2	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0	4:50 PM	0	0	0	0	0
4:55 PM	1	0	1	0	2	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	1	0	0	0	1	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	2	0	2	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	1	1	3	0	5	5:10 PM	0	0	0	0	0	5:10 PM	0	0	0	0	0
5:15 PM	0	1	1	0	2	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	1	0	1	0	2	5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	2	0	1	0	3	5:30 PM	0	0	1	0	1	5:30 PM	0	0	0	0	0
5:35 PM	0	1	0	0	1	5:35 PM	0	0	2	0	2	5:35 PM	0	0	0	0	0
5:40 PM	0	0	2	0	2	5:40 PM	0	0	0	0	0	5:40 PM	0	1	0	0	1
5:45 PM	0	0	1	0	1	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	1	0	1	5:55 PM	1	0	0	1	2
Count Total	12	8	29	1	50	Count Total	1	0	6	0	7	Count Total	1	1	0	1	3
Peak Hour	5	3	19	1	28	Peak Hour	0	0	2	0	2	Peak Hour	0	0	0	0	0



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**Location:** 3 BASKING RIDGE AVE & TENNANT AVE AM

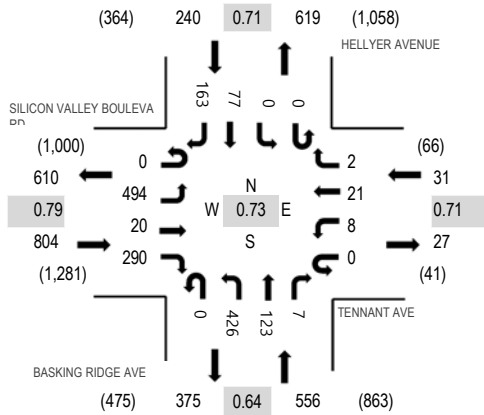
**Date:** Thursday, October 20, 2022

**Peak Hour:** 07:40 AM - 08:40 AM

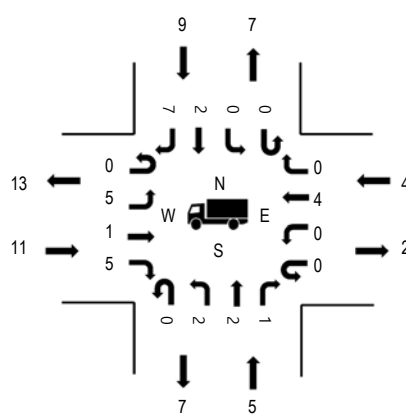
**Peak 15-Minutes:** 08:00 AM - 08:15 AM

## Peak Hour

### Motorized Vehicles



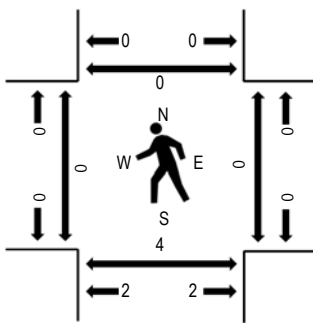
### Heavy Vehicles



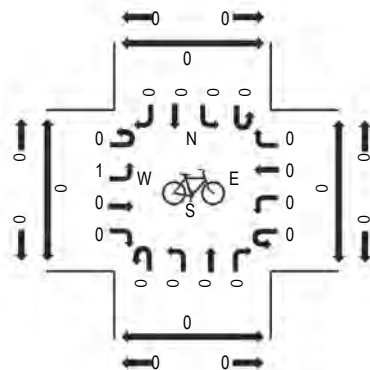
	HV%	PHF
EB	1.4%	0.79
WB	12.9%	0.71
NB	0.9%	0.64
SB	3.8%	0.71
All	1.8%	0.73

Note: Total study counts contained in parentheses.

### Pedestrians



### Bicycles on Road



Traffic Counts - Motorized Vehicles

Interval Start Time	BASKING RIDGE AVE				SILICON VALLEY BOULEVARD				HELLYER AVENUE				TENNANT AVE				Total	Rolling Hour
	Northbound				Eastbound				Southbound				Westbound					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	21	2	0	0	9	1	4	0	0	0	5	0	0	4	0	46	1,113
7:05 AM	0	16	4	0	0	8	0	4	0	0	1	6	0	0	2	1	42	1,255
7:10 AM	0	28	4	0	0	16	1	3	0	0	2	7	0	0	6	0	67	1,386
7:15 AM	0	28	3	0	0	29	3	5	0	0	2	6	0	0	1	0	77	1,514
7:20 AM	0	25	6	0	0	30	0	6	0	0	1	10	0	0	5	0	83	1,585
7:25 AM	0	20	4	0	0	36	1	5	0	0	0	9	0	0	0	0	75	1,616
7:30 AM	0	14	4	0	0	45	1	10	0	0	2	6	0	0	4	0	86	1,628
7:35 AM	0	26	8	0	0	37	0	12	0	0	0	17	0	0	2	0	102	1,628
7:40 AM	0	25	12	0	0	56	2	13	0	0	1	12	0	0	5	0	126	1,631
7:45 AM	0	30	3	0	0	45	0	13	0	0	4	20	0	0	2	1	118	1,590
7:50 AM	0	28	16	0	0	47	3	26	0	0	8	13	0	1	1	0	143	1,570
7:55 AM	0	35	7	1	0	46	4	31	0	0	11	12	0	0	1	0	148	1,531
8:00 AM	0	58	12	0	0	45	2	44	0	0	12	13	0	2	0	0	188	1,461
8:05 AM	0	41	14	2	0	32	2	50	0	0	8	20	0	2	2	0	173	
8:10 AM	0	64	13	2	0	40	2	37	0	0	18	13	0	3	2	1	195	
8:15 AM	0	60	25	0	0	27	1	17	0	0	0	15	0	0	3	0	148	
8:20 AM	0	38	3	2	0	48	2	13	0	0	2	5	0	0	1	0	114	
8:25 AM	0	15	5	0	0	36	0	14	0	0	7	9	0	0	1	0	87	
8:30 AM	0	16	5	0	0	32	1	16	0	0	5	11	0	0	0	0	86	
8:35 AM	0	16	8	0	0	40	1	16	0	0	1	20	0	0	3	0	105	
8:40 AM	0	18	5	0	0	39	0	9	0	0	4	9	0	0	1	0	85	
8:45 AM	0	20	1	1	0	55	3	10	0	0	1	5	0	0	2	0	98	
8:50 AM	0	22	10	0	0	44	1	6	0	0	3	16	0	0	1	1	104	
8:55 AM	0	13	4	0	0	34	2	8	0	0	2	10	0	0	5	0	78	
Count Total	0	677	178	8	0	876	33	372	0	0	95	269	0	8	54	4	2,574	
Peak Hour	0	426	123	7	0	494	20	290	0	0	77	163	0	8	21	2	1,631	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	NB	EB	SB	WB	Total		NB	EB	SB	WB	Total		NB	EB	SB	WB	Total
7:00 AM	0	0	0	1	1	7:00 AM	0	0	0	0	0	7:00 AM	1	0	0	0	1
7:05 AM	0	0	0	1	1	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	3	0	3	6	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	3	0	0	3	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	4	1	0	5	7:25 AM	0	0	0	0	0	7:25 AM	1	0	0	1	2
7:30 AM	0	2	0	0	2	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	1	0	0	1	7:35 AM	1	0	0	0	1	7:35 AM	1	0	0	1	2
7:40 AM	1	0	0	0	1	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	0	2	0	2	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0
7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	2	0	0	2	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:05 AM	0	2	1	0	3	8:05 AM	0	0	0	0	0	8:05 AM	1	0	0	0	1
8:10 AM	0	1	2	1	4	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	3	1	0	4	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	2	1	1	1	5	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	2	1	1	1	5	8:25 AM	0	0	0	0	0	8:25 AM	3	0	0	0	3
8:30 AM	0	0	1	0	1	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	1	0	1	2	8:35 AM	0	1	0	0	1	8:35 AM	0	0	0	0	0
8:40 AM	0	3	0	0	3	8:40 AM	0	1	0	0	1	8:40 AM	0	0	0	0	0
8:45 AM	0	2	1	0	3	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	1	1	0	2	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	2	1	0	1	4	8:55 AM	0	0	0	0	0	8:55 AM	0	0	0	1	1
Count Total	7	31	12	10	60	Count Total	1	2	0	0	3	Count Total	7	0	0	3	10
Peak Hour	5	11	9	4	29	Peak Hour	0	1	0	0	1	Peak Hour	4	0	0	0	4



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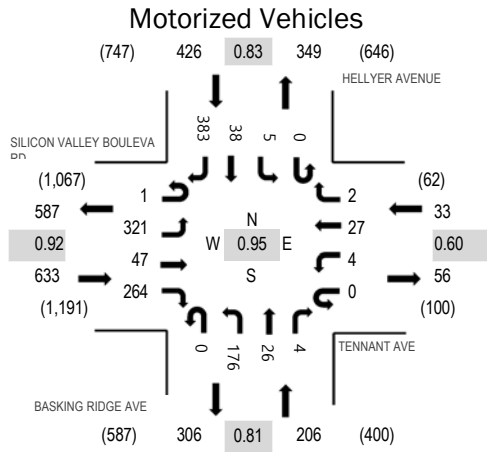
**Location:** 3 BASKING RIDGE AVE & TENNANT AVE PM

**Date:** Thursday, October 20, 2022

**Peak Hour:** 04:45 PM - 05:45 PM

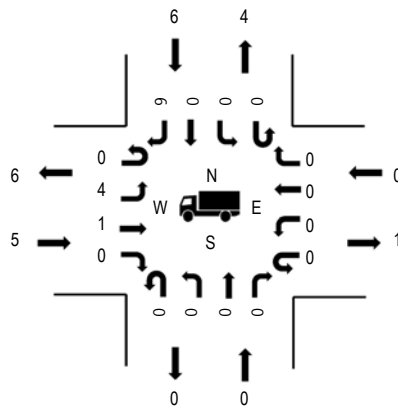
**Peak 15-Minutes:** 05:30 PM - 05:45 PM

## Peak Hour



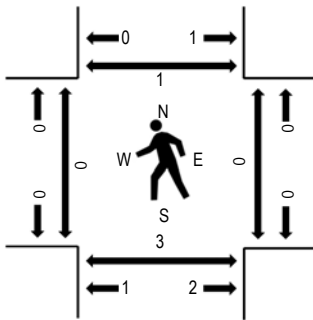
Note: Total study counts contained in parentheses.

## Heavy Vehicles

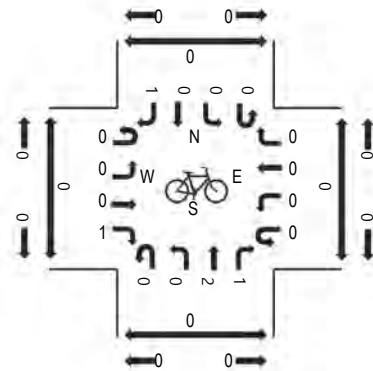


	HV%	PHF
EB	0.8%	0.92
WB	0.0%	0.60
NB	0.0%	0.81
SB	1.4%	0.83
All	0.8%	0.95

## Pedestrians



## Bicycles on Road





Traffic Counts - Motorized Vehicles

Interval Start Time	BASKING RIDGE AVE				SILICON VALLEY BOULEVARD				HELLYER AVENUE				TENNANT AVE				Total	Rolling Hour
	Northbound				Eastbound				Southbound				Westbound					
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	12	2	0	0	23	5	16	0	0	4	13	0	1	3	0	79	1,153
4:05 PM	0	15	0	0	0	18	3	18	0	0	6	20	0	0	1	0	81	1,169
4:10 PM	0	11	3	0	0	27	3	21	0	0	5	32	0	0	4	0	106	1,214
4:15 PM	0	15	1	0	0	18	1	17	0	0	3	28	0	0	1	0	84	1,215
4:20 PM	0	13	0	0	0	27	0	32	0	0	1	20	0	0	2	1	96	1,239
4:25 PM	0	19	1	1	0	21	5	19	0	1	3	32	0	0	3	0	105	1,248
4:30 PM	0	16	2	1	0	19	3	15	0	0	2	23	0	0	4	0	85	1,238
4:35 PM	0	15	4	0	0	30	4	18	0	0	2	26	0	0	0	0	99	1,278
4:40 PM	0	10	1	0	0	31	4	22	0	0	4	26	0	0	1	0	99	1,287
4:45 PM	0	14	1	0	0	24	3	28	0	0	2	37	0	0	3	0	112	1,298
4:50 PM	0	23	1	1	0	28	4	16	0	0	2	28	0	0	2	0	105	1,276
4:55 PM	0	13	2	0	1	27	4	18	0	1	0	29	0	1	5	1	102	1,268
5:00 PM	0	14	4	0	0	19	3	18	0	0	4	27	0	1	5	0	95	1,247
5:05 PM	0	8	1	0	0	29	2	29	0	0	2	53	0	0	2	0	126	
5:10 PM	0	14	2	0	0	16	8	24	0	0	2	40	0	0	1	0	107	
5:15 PM	0	14	1	1	0	33	8	19	0	0	4	28	0	0	0	0	108	
5:20 PM	0	16	3	1	0	27	1	17	0	1	6	33	0	0	0	0	105	
5:25 PM	0	7	1	0	0	29	4	29	0	0	2	20	0	1	2	0	95	
5:30 PM	0	18	4	0	0	31	6	31	0	0	4	27	0	1	2	1	125	
5:35 PM	0	18	3	1	0	32	1	13	0	1	6	30	0	0	3	0	108	
5:40 PM	0	17	3	0	0	26	3	22	0	2	4	31	0	0	2	0	110	
5:45 PM	0	16	1	0	0	21	2	23	0	0	4	22	0	0	1	0	90	
5:50 PM	0	9	1	0	0	32	3	21	0	0	1	28	0	0	2	0	97	
5:55 PM	0	21	3	1	0	10	5	21	0	2	2	11	0	0	5	0	81	
Count Total	0	348	45	7	1	598	85	507	0	8	75	664	0	5	54	3	2,400	
Peak Hour	0	176	26	4	1	321	47	264	0	5	38	383	0	4	27	2	1,298	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	NB	EB	SB	WB	Total		NB	EB	SB	WB	Total		NB	EB	SB	WB	Total
4:00 PM	2	0	1	0	3	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	1	0	0	1	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	1	0	1	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	1	0	0	1	4:30 PM	0	0	0	0	0	4:30 PM	1	1	0	0	2
4:35 PM	0	0	1	0	1	4:35 PM	1	0	1	0	2	4:35 PM	0	0	0	0	0
4:40 PM	0	0	2	0	2	4:40 PM	0	0	0	0	0	4:40 PM	0	0	2	0	2
4:45 PM	0	0	1	0	1	4:45 PM	0	0	0	0	0	4:45 PM	0	0	0	0	0
4:50 PM	0	0	0	0	0	4:50 PM	0	1	0	0	1	4:50 PM	0	0	0	0	0
4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0
5:10 PM	0	0	2	0	2	5:10 PM	1	0	1	0	2	5:10 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	1	0	0	1	5:20 PM	1	0	0	0	1	5:20 PM	0	0	0	0	0
5:25 PM	0	0	0	0	0	5:25 PM	1	0	0	0	1	5:25 PM	0	0	0	0	0
5:30 PM	0	2	0	0	2	5:30 PM	0	0	0	0	0	5:30 PM	1	0	0	0	1
5:35 PM	0	2	3	0	5	5:35 PM	0	0	0	0	0	5:35 PM	1	0	0	0	1
5:40 PM	0	0	0	0	0	5:40 PM	0	0	0	0	0	5:40 PM	1	0	1	0	2
5:45 PM	0	1	0	0	1	5:45 PM	0	0	1	1	2	5:45 PM	1	1	0	1	3
5:50 PM	0	0	1	0	1	5:50 PM	0	0	1	0	1	5:50 PM	3	0	0	0	3
5:55 PM	0	0	0	0	0	5:55 PM	0	2	0	0	2	5:55 PM	0	0	0	0	0
Count Total	2	8	12	0	22	Count Total	4	3	4	1	12	Count Total	8	2	3	1	14
Peak Hour	0	5	6	0	11	Peak Hour	3	1	1	0	5	Peak Hour	3	0	1	0	4

**Appendix D**  
**Approved Trips Inventory (ATI)**

[illegible]

**AM PROJECT TRIPS**

10/11/2022

**Intersection of :** Bernal Rd & NB 85 To Bernal Rp & SB 85 From Bernal Rp**Traffic Node Number :** 3003

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC04-100R&D (3-14681) Office/Industrial ROUTE 85/GREAT OAKS ISTAR - R&D PORTION	0	0	0	0	0	0	0	59	36	0	380	0
PDC12-028 RES (3-14681) Residential  ISTAR MIXED-USE	0	0	0	0	0	0	0	25	30	0	31	0
PDC99-053 (3-13970) LEGACY  CISCO NORTH COYOTE VALLEY	0	0	0	0	0	458	0	119	0	19	8	0
<b>TOTAL:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>301</b>	<b>0</b>	<b>392</b>	<b>0</b>	<b>40</b>	<b>136</b>	<b>89</b>	<b>1088</b>	<b>0</b>

	<b>LEFT</b>	<b>THRU</b>	<b>RIGHT</b>
<b>NORTH</b>	301	0	392
<b>EAST</b>	89	1088	0
<b>SOUTH</b>	0	0	0
<b>WEST</b>	0	40	136

[illegible]

**PM PROJECT TRIPS**

10/11/2022

**Intersection of :** Bernal Rd & NB 85 To Bernal Rp & SB 85 From Bernal Rp**Traffic Node Number :** 3003

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC04-100R&D (3-14681) Office/Industrial ROUTE 85/GREAT OAKS ISTAR - R&D PORTION	0	0	0	0	0	0	0	233	142	0	42	0
PDC12-028 RES (3-14681) Residential  ISTAR MIXED-USE	0	0	0	0	0	0	0	11	13	0	49	0
PDC99-053 (3-13970) LEGACY  CISCO NORTH COYOTE VALLEY	0	0	0	0	0	49	0	461	0	2	1	0
<b>TOTAL:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>(189)</b>	<b>0</b>	<b>1074</b>	<b>439</b>	<b>197</b>	<b>127</b>	<b>0</b>

	<b>LEFT</b>	<b>THRU</b>	<b>RIGHT</b>
<b>NORTH</b>	3	0	(189)
<b>EAST</b>	197	127	0
<b>SOUTH</b>	0	0	0
<b>WEST</b>	0	1074	439

**AM PROJECT TRIPS**

10/11/2022

**Intersection of :** Bernal Rd & Silicon Valley Bl / SB 101 To Silicon Valley Rp**Traffic Node Number :** 3017

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
COYOTE REASSIGN Office/Industrial NORTH COYOTE VALLEY COYOTE VALLEY	0	0	0	-3	0	-75	0	-319	0	0	-19	0
EDENVALE1 Office/Industrial EAST OF 101, NORTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 1	0	0	0	0	0	4	0	39	0	0	4	0
EDENVALE2 Office/Industrial W/O 101, BOUNDED BY COTTLE RD, SANTA TERESA AND EDENVALE ZONE 2	0	0	0	0	0	342	0	96	0	0	334	0
EDENVALE3-4 Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 3&4	0	0	0	109	0	0	0	442	0	0	150	0
EDENVALE3-4POOL Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE AREA 3-4 POOL	0	0	0	12	0	0	0	53	0	0	18	0
NORTH COYOTE Office/Industrial NORTH COYOTE VALLEY NORTH COYOTE VALLEY CAMPUS INDUSTRIAL	0	0	0	0	0	0	0	0	0	0	24	0
PDC04-100R&D (3-14681) Office/Industrial ROUTE 85/GREAT OAKS ISTAR - R&D PORTION	0	0	0	0	0	236	0	59	0	0	144	0



**AM PROJECT TRIPS**

10/11/2022

**Intersection of** : Bernal Rd & Silicon Valley Bl / SB 101 To Silicon Valley Rp**Traffic Node Number** : 3017

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC12-028 RES (3-14681) Residential	0	0	0	0	0	10	0	25	0	0	20	0
ISTAR MIXED-USE												
PDC99-053 (3-13970) LEGACY	0	0	0	0	0	0	0	2	0	0	27	0
CISCO NORTH COYOTE VALLEY												
<b>TOTAL:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>118</b>	<b>0</b>	<b>517</b>	<b>0</b>	<b>397</b>	<b>0</b>	<b>0</b>	<b>702</b>	<b>0</b>

	<b>LEFT</b>	<b>THRU</b>	<b>RIGHT</b>
<b>NORTH</b>	118	0	517
<b>EAST</b>	0	702	0
<b>SOUTH</b>	0	0	0
<b>WEST</b>	0	397	0

**PM PROJECT TRIPS**

10/11/2022

**Intersection of :** Bernal Rd & Silicon Valley Bl / SB 101 To Silicon Valley Rp**Traffic Node Number :** 3017

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
COYOTE REASSIGN Office/Industrial NORTH COYOTE VALLEY COYOTE VALLEY	0	0	0	-10	0	-268	0	-65	0	0	-2	0
EDENVALE1 Office/Industrial EAST OF 101, NORTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 1	0	0	0	0	0	19	0	4	0	0	19	0
EDENVALE2 Office/Industrial W/O 101, BOUNDED BY COTTLE RD, SANTA TERESA AND EDENVALE ZONE 2	0	0	0	0	0	37	0	390	0	0	36	0
EDENVALE3-4 Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 3&4	0	0	0	11	0	3	0	47	0	0	605	0
EDENVALE3-4POOL Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE AREA 3-4 POOL	0	0	0	1	0	0	0	6	0	0	74	0
NORTH COYOTE Office/Industrial NORTH COYOTE VALLEY NORTH COYOTE VALLEY CAMPUS INDUSTRIAL	0	0	0	0	0	0	0	0	0	0	6	0
PDC04-100R&D (3-14681) Office/Industrial ROUTE 85/GREAT OAKS ISTAR - R&D PORTION	0	0	0	0	0	26	0	233	0	0	16	0

**PM PROJECT TRIPS**

10/11/2022

**Intersection of** : Bernal Rd & Silicon Valley Bl / SB 101 To Silicon Valley Rp**Traffic Node Number** : 3017

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC12-028 RES (3-14681) Residential	0	0	0	0	0	16	0	11	0	0	33	0
ISTAR MIXED-USE												
PDC99-053 (3-13970) LEGACY	0	0	0	0	0	0	0	8	0	0	3	0
CISCO NORTH COYOTE VALLEY												
<b>TOTAL:</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>(167)</b>	<b>0</b>	<b>634</b>	<b>0</b>	<b>0</b>	<b>790</b>	<b>0</b>

	<b>LEFT</b>	<b>THRU</b>	<b>RIGHT</b>
<b>NORTH</b>	2	0	(167)
<b>EAST</b>	0	790	0
<b>SOUTH</b>	0	0	0
<b>WEST</b>	0	634	0

**AM PROJECT TRIPS**

10/11/2022

**Intersection of :** Fontanoso Rd & Hellyer Av & Silver Creek Valley Rd & N Silver Cre**Traffic Node Number :** 3848

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
EDENVALE1 Office/Industrial EAST OF 101, NORTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 1	5	18	0	4	4	48	186	0	1	0	2	19
EDENVALE2 Office/Industrial W/O 101, BOUNDED BY COTTLE RD, SANTA TERESA AND EDENVALE ZONE 2	0	0	12	0	0	0	0	4	0	51	18	0
EDENVALE3-4 Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 3&4	34	30	10	0	122	14	3	0	141	43	3	0
EDENVALE3-4POOL Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE AREA 3-4 POOL	4	3	1	0	14	1	0	0	17	4	0	0
EEHDP (RES) Residential EVERGREEN EEHDP (RESIDENTIAL)	0	0	0	0	0	0	0	0	0	0	0	0
HITACHI CREDIT (3-14641) Office/Industrial 5600 COTTLE RD HITACHI CREDIT	12	0	0	0	0	0	3	5	0	0	25	0
NORTH COYOTE Office/Industrial NORTH COYOTE VALLEY NORTH COYOTE VALLEY CAMPUS INDUSTRIAL	0	0	0	0	0	0	0	60	0	0	241	0

**AM PROJECT TRIPS**

10/11/2022

**Intersection of** : Fontanoso Rd & Hellyer Av & Silver Creek Valley Rd & N Silver Cre**Traffic Node Number** : 3848

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC04-100R&D (3-14681) Office/Industrial ROUTE 85/GREAT OAKS ISTAR - R&D PORTION	0	0	0	0	0	0	0	7	0	0	29	0
PDC99-053 (3-13970) LEGACY	0	0	0	0	0	0	0	69	0	0	269	0
CISCO NORTH COYOTE VALLEY												
<b>TOTAL:</b>	<b>55</b>	<b>51</b>	<b>23</b>	<b>4</b>	<b>140</b>	<b>63</b>	<b>192</b>	<b>145</b>	<b>159</b>	<b>98</b>	<b>587</b>	<b>19</b>

	<b>LEFT</b>	<b>THRU</b>	<b>RIGHT</b>
<b>NORTH</b>	4	140	63
<b>EAST</b>	98	587	19
<b>SOUTH</b>	55	51	23
<b>WEST</b>	192	145	159

**PM PROJECT TRIPS**

10/11/2022

**Intersection of :** Fontanoso Rd & Hellyer Av & Silver Creek Valley Rd & N Silver Cre**Traffic Node Number :** 3848

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
EDENVALE1 Office/Industrial EAST OF 101, NORTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 1	0	2	0	18	17	197	2	2	4	0	0	2
EDENVALE2 Office/Industrial W/O 101, BOUNDED BY COTTLE RD, SANTA TERESA AND EDENVALE ZONE 2	0	0	51	0	0	0	0	18	0	5	1	0
EDENVALE3-4 Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 3&4	137	121	43	0	13	1	14	3	15	4	0	0
EDENVALE3-4POOL Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE AREA 3-4 POOL	17	14	4	0	1	0	1	0	1	0	0	0
EEHDP (RES) Residential EVERGREEN EEHDP (RESIDENTIAL)	0	0	1	0	0	0	0	2	0	0	1	0
HITACHI CREDIT (3-14641) Office/Industrial 5600 COTTLE RD HITACHI CREDIT	13	0	0	0	0	0	9	18	0	0	17	0
NORTH COYOTE Office/Industrial NORTH COYOTE VALLEY NORTH COYOTE VALLEY CAMPUS INDUSTRIAL	0	0	0	0	0	0	0	241	0	0	60	0

**PM PROJECT TRIPS**

10/11/2022

**Intersection of** : Fontanoso Rd & Hellyer Av & Silver Creek Valley Rd & N Silver Cre**Traffic Node Number** : 3848

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC04-100R&D (3-14681) Office/Industrial ROUTE 85/GREAT OAKS ISTAR - R&D PORTION	0	0	0	0	0	0	0	28	0	0	3	0
PDC99-053 (3-13970) LEGACY	0	0	0	0	0	0	0	267	0	0	29	0
CISCO NORTH COYOTE VALLEY												
<b>TOTAL:</b>	<b>167</b>	<b>137</b>	<b>99</b>	<b>18</b>	<b>31</b>	<b>198</b>	<b>26</b>	<b>579</b>	<b>20</b>	<b>9</b>	<b>111</b>	<b>2</b>

	<b>LEFT</b>	<b>THRU</b>	<b>RIGHT</b>
<b>NORTH</b>	18	31	198
<b>EAST</b>	9	111	2
<b>SOUTH</b>	167	137	99
<b>WEST</b>	26	579	20



[illegible]

**AM PROJECT TRIPS**

10/11/2022

**Intersection of** : NB 101 To Silicon Valley Rp & Silicon Valley Bl**Traffic Node Number** : 3860

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC12-028 RES (3-14681) Residential	17	0	0	0	0	0	0	7	0	0	3	0
ISTAR MIXED-USE												
PDC99-053 (3-13970) LEGACY	0	0	5	0	0	0	0	2	0	0	27	0
CISCO NORTH COYOTE VALLEY												
<b>TOTAL:</b>	<b>444</b>	<b>0</b>	<b>202</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>644</b>	<b>0</b>	<b>0</b>	<b>287</b>	<b>0</b>

	<b>LEFT</b>	<b>THRU</b>	<b>RIGHT</b>
<b>NORTH</b>	0	0	0
<b>EAST</b>	0	287	0
<b>SOUTH</b>	444	0	202
<b>WEST</b>	0	644	0

[illegible]

**PM PROJECT TRIPS**

10/11/2022

**Intersection of :** NB 101 To Silicon Valley Rp & Silicon Valley Bl**Traffic Node Number :** 3860

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
PDC12-028 RES (3-14681) Residential	27	0	0	0	0	0	0	2	0	0	6	0
ISTAR MIXED-USE												
PDC99-053 (3-13970) LEGACY	0	0	19	0	0	0	0	8	0	0	3	0
CISCO NORTH COYOTE VALLEY												
<b>TOTAL:</b>	<b>73</b>	<b>0</b>	<b>62</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>87</b>	<b>0</b>	<b>0</b>	<b>836</b>	<b>0</b>

	<b>LEFT</b>	<b>THRU</b>	<b>RIGHT</b>
<b>NORTH</b>	0	0	0
<b>EAST</b>	0	836	0
<b>SOUTH</b>	73	0	62
<b>WEST</b>	0	87	0

CISCO NORTH COYOTE VALLEY

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<b>TOTAL:</b>	<b>(43)</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>233</b>	<b>716</b>	<b>62</b>	<b>(11)</b>	<b>0</b>	<b>40</b>	<b>0</b>
---------------	-------------	----------	----------	----------	----------	------------	------------	-----------	-------------	----------	-----------	----------

	LEFT	THRU	RIGHT
NORTH	0	1	233
EAST	0	40	0
SOUTH	(43)	9	0
WEST	716	62	(11)

CISCO NORTH COYOTE VALLEY



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TOTAL:	(5)	0	0	0	9	698	138	32	(42)	0	58	0
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	LEFT	THRU	RIGHT
NORTH	0	9	698
EAST	0	58	0
SOUTH	(5)	0	0
WEST	138	32	(42)

**AM PROJECT TRIPS**

10/11/2022

**Intersection of** : Hellyer Av & Piercy Rd**Traffic Node Number** : 3949

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
EDENVALE1 Office/Industrial EAST OF 101, NORTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 1	0	22	0	0	5	0	0	0	0	0	0	0
EDENVALE2 Office/Industrial W/O 101, BOUNDED BY COTTLE RD, SANTA TERESA AND EDENVALE ZONE 2	0	12	0	0	51	0	0	0	0	0	0	0
EDENVALE3-4 Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 3&4	98	81	0	0	158	76	18	44	36	0	11	0
EDENVALE3-4POOL Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE AREA 3-4 POOL	12	9	0	0	18	9	1	4	4	0	1	0
<b>TOTAL:</b>	<b>110</b>	<b>124</b>	<b>0</b>	<b>0</b>	<b>232</b>	<b>85</b>	<b>19</b>	<b>48</b>	<b>40</b>	<b>0</b>	<b>12</b>	<b>0</b>

	<b>LEFT</b>	<b>THRU</b>	<b>RIGHT</b>
<b>NORTH</b>	0	232	85
<b>EAST</b>	0	12	0
<b>SOUTH</b>	110	124	0
<b>WEST</b>	19	48	40

**PM PROJECT TRIPS**

10/11/2022

**Intersection of** : Hellyer Av & Piercy Rd**Traffic Node Number** : 3949

Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
EDENVALE1 Office/Industrial EAST OF 101, NORTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 1	0	2	0	0	22	0	0	0	0	0	0	0
EDENVALE2 Office/Industrial W/O 101, BOUNDED BY COTTLE RD, SANTA TERESA AND EDENVALE ZONE 2	0	51	0	0	5	0	0	0	0	0	0	0
EDENVALE3-4 Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 3&4	24	147	0	0	0	0	0	0	98	0	44	0
EDENVALE3-4POOL Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE AREA 3-4 POOL	3	17	0	0	0	0	0	0	12	0	4	0
<b>TOTAL:</b>	<b>27</b>	<b>217</b>	<b>0</b>	<b>0</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>110</b>	<b>0</b>	<b>48</b>	<b>0</b>

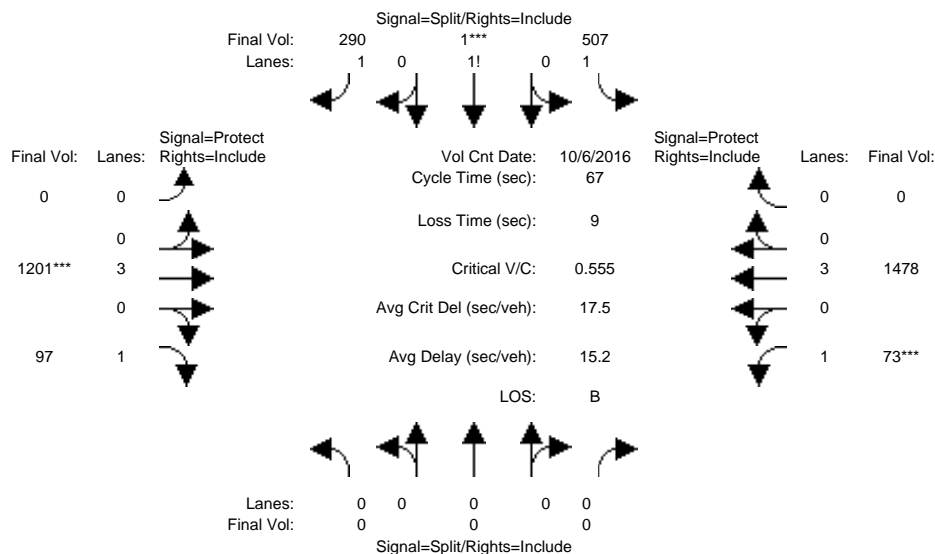
	<b>LEFT</b>	<b>THRU</b>	<b>RIGHT</b>
<b>NORTH</b>	0	27	0
<b>EAST</b>	0	48	0
<b>SOUTH</b>	27	217	0
<b>WEST</b>	0	0	110

## **Appendix E**

### **Intersection Level of Service Calculations**

644 & 675 Piercy Road Industrial  
San Jose, CA  
Hexagon Transportation Consultants, Inc.  
Level Of Service Computation Report  
2000 HCM Operations (Future Volume Alternative)  
Existing AM

## Intersection #3003: 85/BERNAL



Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Min. Green: 0 0 0 10 10 10 0 10 10 7 10 0

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Volume Module: >> Count Date: 6 Oct 2016 << 7:40-8:40AM (growth rate applied to count)

Base Vol: 0 0 0 507 1 290 0 1201 97 73 1478 0

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 0 0 0 507 1 290 0 1201 97 73 1478 0

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 0 0 0 507 1 290 0 1201 97 73 1478 0

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 0 0 0 507 1 290 0 1201 97 73 1478 0

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 0 0 0 507 1 290 0 1201 97 73 1478 0

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Volume: 0 0 0 507 1 290 0 1201 97 73 1478 0

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.92 1.00 0.92 0.92 0.92 0.92 0.92 1.00 0.92 0.92 1.00 0.92

Lanes: 0.00 0.00 0.00 1.63 0.01 1.36 0.00 3.00 1.00 1.00 3.00 0.00

Final Sat.: 0 0 0 2860 4 2385 0 5700 1750 1750 5700 0

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.18 0.23 0.12 0.00 0.21 0.06 0.04 0.26 0.00

Crit Moves: \*\*\*\*

Green Time: 0.0 0.0 0.0 26.5 26.5 26.5 0.0 24.5 24.5 7.0 31.5 0.0

Volume/Cap: 0.00 0.00 0.00 0.45 0.58 0.31 0.00 0.58 0.15 0.40 0.55 0.00

Delay/Veh: 0.0 0.0 0.0 15.0 16.5 14.0 0.0 17.5 14.4 29.5 13.0 0.0

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 0.0 0.0 0.0 15.0 16.5 14.0 0.0 17.5 14.4 29.5 13.0 0.0

LOS by Move: A A A B B B A B B C B A

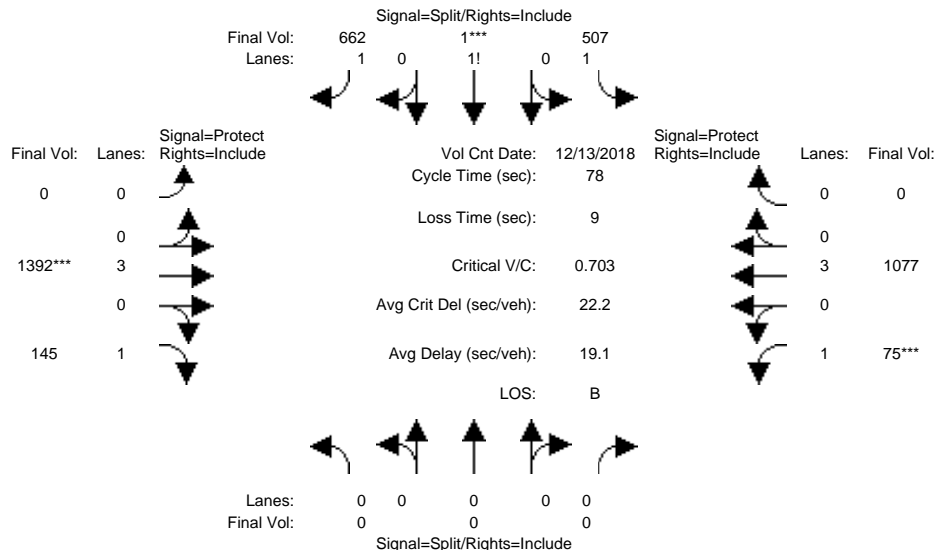
HCM2k95thQ: 0 0 0 11 14 7 0 14 3 4 15 0

Note: Queue reported is the number of cars per lane.

644 & 675 Piercy Road Industrial  
San Jose, CA  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report  
2000 HCM Operations (Future Volume Alternative)  
Existing PM

## Intersection #3003: 85/BERNAL



Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Min. Green: 0 0 0 10 10 10 0 10 10 7 10 0  
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Volume Module: >> Count Date: 13 Dec 2018 << 4:45 - 5:45 PM (growth rate applied to count)

Base Vol: 0 0 0 507 1 662 0 1392 145 75 1077 0  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 0 0 0 507 1 662 0 1392 145 75 1077 0  
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 0 0 0 507 1 662 0 1392 145 75 1077 0  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
PHF Volume: 0 0 0 507 1 662 0 1392 145 75 1077 0  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 0 0 0 507 1 662 0 1392 145 75 1077 0  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
FinalVolume: 0 0 0 507 1 662 0 1392 145 75 1077 0

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900  
Adjustment: 0.92 1.00 0.92 0.92 0.92 0.92 0.92 1.00 0.92 0.92 1.00 0.92  
Lanes: 0.00 0.00 0.00 1.43 0.01 1.56 0.00 3.00 1.00 1.00 3.00 0.00  
Final Sat.: 0 0 0 2508 3 2739 0 5700 1750 1750 5700 0

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.20 0.33 0.24 0.00 0.24 0.08 0.04 0.19 0.00  
Crit Moves: \*\*\*\*

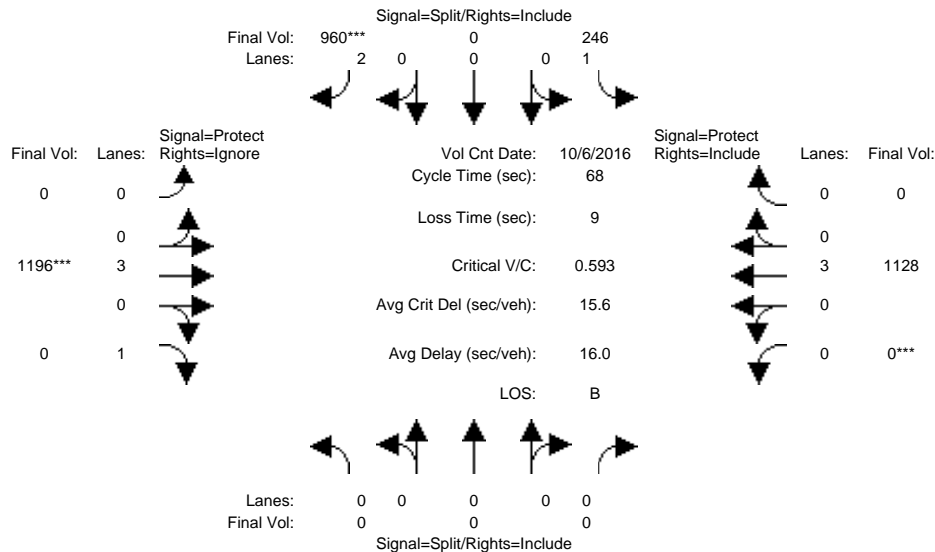
Green Time: 0.0 0.0 0.0 35.8 35.8 35.8 0.0 26.2 26.2 7.0 33.2 0.0  
Volume/Cap: 0.00 0.00 0.00 0.44 0.73 0.53 0.00 0.73 0.25 0.48 0.44 0.00  
Delay/Veh: 0.0 0.0 0.0 14.4 18.8 15.3 0.0 24.2 19.0 36.0 16.0 0.0  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 0.0 0.0 0.0 14.4 18.8 15.3 0.0 24.2 19.0 36.0 16.0 0.0  
LOS by Move: A A A B B B A C B D B A  
HCM2k95thQ: 0 0 0 12 24 15 0 20 6 5 12 0

Note: Queue reported is the number of cars per lane.

644 & 675 Piercy Road Industrial  
San Jose, CA  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report  
2000 HCM Operations (Future Volume Alternative)  
Existing AM

## Intersection #3017: 101/BERNAL (W)



Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Min. Green: 0 0 0 10 0 10 0 10 10 0 10 0  
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Volume Module: >> Count Date: 6 Oct 2016 << 7:35-8:35AM (growth rate applied to count)

Base Vol: 0 0 0 246 0 960 0 1196 0 0 1128 0  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 0 0 0 246 0 960 0 1196 0 0 1128 0  
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 0 0 0 246 0 960 0 1196 0 0 1128 0  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00  
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00  
PHF Volume: 0 0 0 246 0 960 0 1196 0 0 1128 0  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 0 0 0 246 0 960 0 1196 0 0 1128 0  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00  
FinalVolume: 0 0 0 246 0 960 0 1196 0 0 1128 0

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900  
Adjustment: 0.92 1.00 0.92 0.92 1.00 0.83 0.92 1.00 0.92 0.92 1.00 0.92  
Lanes: 0.00 0.00 0.00 1.00 0.00 2.00 0.00 3.00 1.00 0.00 3.00 0.00  
Final Sat.: 0 0 0 1750 0 3150 0 5700 1750 0 5700 0

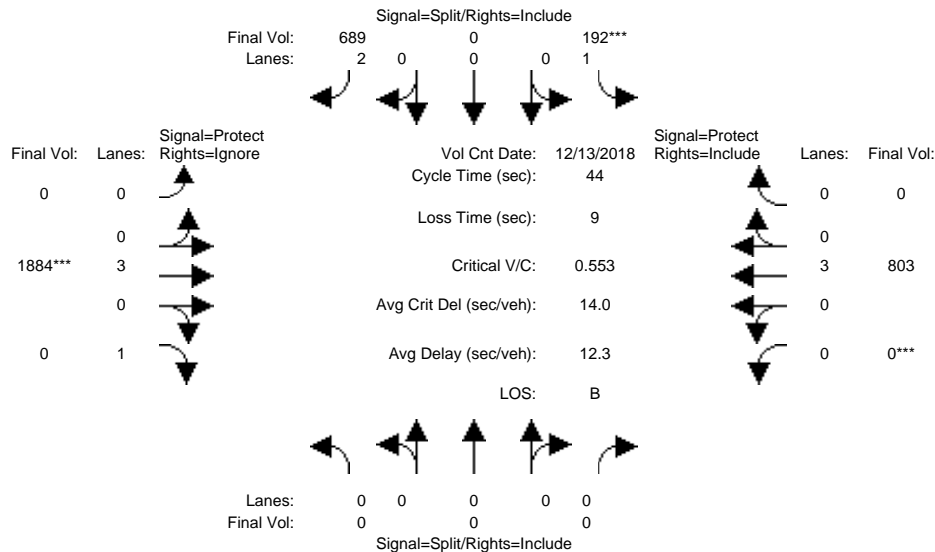
Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.14 0.00 0.30 0.00 0.21 0.00 0.00 0.20 0.00  
Crit Moves: \*\*\*\* \*  
Green Time: 0.0 0.0 0.0 34.9 0.0 34.9 0.0 24.1 0.0 0.0 24.1 0.0  
Volume/Cap: 0.00 0.00 0.00 0.27 0.00 0.59 0.00 0.59 0.00 0.00 0.56 0.00  
Delay/Veh: 0.0 0.0 0.0 9.5 0.0 12.2 0.0 18.4 0.0 0.0 18.1 0.0  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 0.0 0.0 0.0 9.5 0.0 12.2 0.0 18.4 0.0 0.0 18.1 0.0  
LOS by Move: A A A A A B A B A A B A  
HCM2k95thQ: 0 0 0 6 0 17 0 14 0 0 13 0  
Note: Queue reported is the number of cars per lane.

644 & 675 Piercy Road Industrial  
San Jose, CA  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report  
2000 HCM Operations (Future Volume Alternative)  
Existing PM

## Intersection #3017: 101/BERNAL (W)



Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Min. Green: 0 0 0 10 0 10 0 10 10 0 10 0  
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Volume Module: >> Count Date: 13 Dec 2018 << 5:00 - 6:00 PM (growth rate applied to count)

Base Vol: 0 0 0 192 0 689 0 1884 0 0 803 0  
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
Initial Bse: 0 0 0 192 0 689 0 1884 0 0 803 0  
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0  
Initial Fut: 0 0 0 192 0 689 0 1884 0 0 803 0  
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00  
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00  
PHF Volume: 0 0 0 192 0 689 0 1884 0 0 803 0  
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0  
Reduced Vol: 0 0 0 192 0 689 0 1884 0 0 803 0  
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00  
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0.00 1.00 1.00 1.00  
FinalVolume: 0 0 0 192 0 689 0 1884 0 0 803 0

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900  
Adjustment: 0.92 1.00 0.92 0.92 1.00 0.83 0.92 1.00 0.92 0.92 1.00 0.92  
Lanes: 0.00 0.00 0.00 1.00 0.00 2.00 0.00 3.00 1.00 0.00 3.00 0.00  
Final Sat.: 0 0 0 1750 0 3150 0 5700 1750 0 5700 0

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.11 0.00 0.22 0.00 0.33 0.00 0.00 0.14 0.00  
Crit Moves: \*\*\*\*

Green Time: 0.0 0.0 0.0 17.4 0.0 17.4 0.0 17.6 0.0 0.0 17.6 0.0  
Volume/Cap: 0.00 0.00 0.00 0.28 0.00 0.55 0.00 0.83 0.00 0.00 0.35 0.00  
Delay/Veh: 0.0 0.0 0.0 9.3 0.0 10.8 0.0 14.4 0.0 0.0 9.3 0.0  
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00  
AdjDel/Veh: 0.0 0.0 0.0 9.3 0.0 10.8 0.0 14.4 0.0 0.0 9.3 0.0  
LOS by Move: A A A A A B A B A A A A  
HCM2k95thQ: 0 0 0 4 0 10 0 20 0 0 6 0

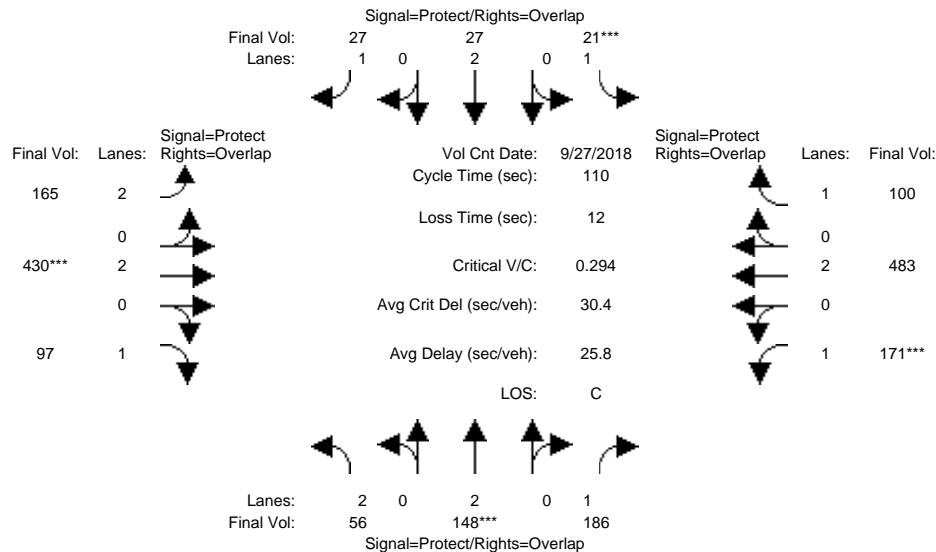
Note: Queue reported is the number of cars per lane.



644 & 675 Piercy Road Industrial  
San Jose, CA  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report  
2000 HCM Operations (Future Volume Alternative)  
Existing AM

# Intersection #3848: HELLYER/SILVER CREEK VALLEY



Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Min. Green: 7 10 10 7 10 10 7 10 10 7 10 10

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Volume Module: >> Count Date: 27 Sep 2018 << 7:35-8:35AM (growth rate applied to count)

Base Vol: 56 148 186 21 27 27 165 430 97 171 483 100

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 56 148 186 21 27 27 165 430 97 171 483 100

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 56 148 186 21 27 27 165 430 97 171 483 100

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 56 148 186 21 27 27 165 430 97 171 483 100

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 56 148 186 21 27 27 165 430 97 171 483 100

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Final Volume: 56 148 186 21 27 27 165 430 97 171 483 100

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.83 1.00 0.92 0.92 1.00 0.92 0.83 1.00 0.92 0.92 1.00 0.92

Lanes: 2.00 2.00 1.00 1.00 2.00 1.00 2.00 2.00 1.00 1.00 2.00 1.00

Final Sat.: 3150 3800 1750 1750 3800 1750 3150 3800 1750 1750 3800 1750

Capacity Analysis Module:

Vol/Sat: 0.02 0.04 0.11 0.01 0.01 0.02 0.05 0.11 0.06 0.10 0.13 0.06

Crit Moves: \*\*\*\*

Green Time: 8.7 14.2 49.8 7.0 12.5 38.1 25.6 41.2 49.9 35.6 51.2 58.2

Volume/Cap: 0.22 0.30 0.23 0.19 0.06 0.04 0.22 0.30 0.12 0.30 0.27 0.11

Delay/Veh: 49.5 45.0 19.1 52.5 43.8 24.0 34.9 24.8 17.7 29.3 18.4 13.2

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 49.5 45.0 19.1 52.5 43.8 24.0 34.9 24.8 17.7 29.3 18.4 13.2

LOS by Move: D D B D D C C C B C B B

HCM2k95thQ: 3 5 8 2 1 2 6 10 5 9 10 4

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report  
2000 HCM Operations (Future Volume Alternative)  
Existing PM

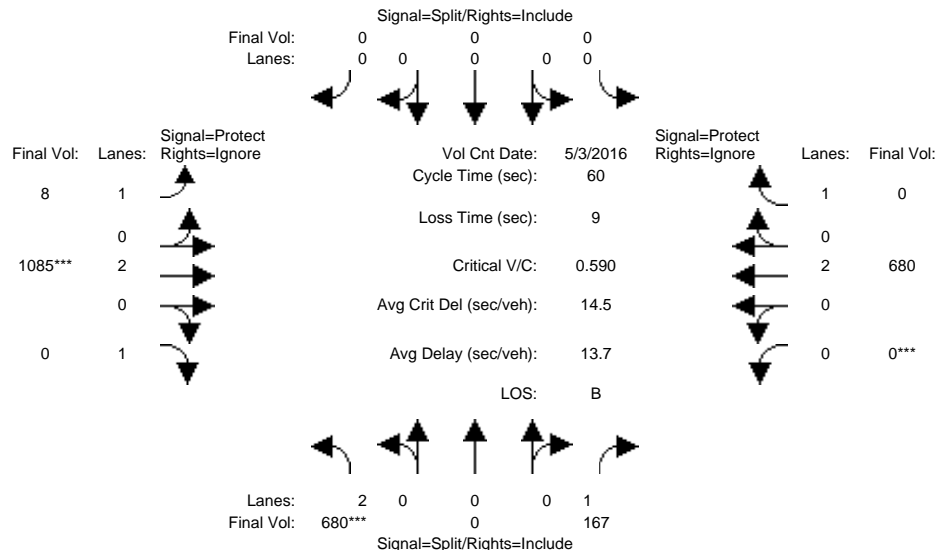
[illegible]

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
----- ----- ----- ----- -----													
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
----- ----- ----- ----- -----													
Volume Module: >> Count Date: 27 Sep 2018 << 4:55-5:55PM (growth rate applied to count)													
Base Vol:	105	92	272	64	111	128	103	520	68	146	331	67	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	105	92	272	64	111	128	103	520	68	146	331	67	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	105	92	272	64	111	128	103	520	68	146	331	67	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	105	92	272	64	111	128	103	520	68	146	331	67	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	105	92	272	64	111	128	103	520	68	146	331	67	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	105	92	272	64	111	128	103	520	68	146	331	67	
----- ----- ----- ----- -----													
Saturation Flow Module:													
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92	
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00	
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750	
----- ----- ----- ----- -----													
Capacity Analysis Module:													
Vol/Sat:	0.03	0.02	0.16	0.04	0.03	0.07	0.03	0.14	0.04	0.08	0.09	0.04	
Crit Moves:	****			****			****		****				
Green Time:	11.6	12.7	41.7	8.9	10.1	41.6	31.4	47.4	59.0	28.9	44.9	53.8	
Volume/Cap:	0.32	0.21	0.41	0.45	0.32	0.19	0.11	0.32	0.07	0.32	0.21	0.08	
Delay/Veh:	48.1	45.1	27.0	58.2	49.1	23.6	29.3	21.1	12.5	34.4	21.4	15.1	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:	48.1	45.1	27.0	58.2	49.1	23.6	29.3	21.1	12.5	34.4	21.4	15.1	
LOS by Move:	D	D	C	E	D	C	C	C	B	C	C	B	
HCM2k95thQ:	5	4	13	6	5	7	4	11	3	9	7	3	
Note: Queue reported is the number of cars per lane.													

644 & 675 Piercy Road Industrial  
San Jose, CA  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report  
2000 HCM Operations (Future Volume Alternative)  
Existing AM

## Intersection #3860: 101/BERNAL (E)



Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Min. Green: 10 0 10 0 0 0 0 10 10 0 10 10  
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Volume Module: >> Count Date: 3 May 2016 << 7:30-8:30AM (growth rate applied to count)

	North Bound			South Bound			East Bound			West Bound		
Base Vol:	680	0	167	0	0	0	8	1085	426	0	680	167
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	680	0	167	0	0	0	8	1085	426	0	680	167
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	680	0	167	0	0	0	8	1085	426	0	680	167
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	680	0	167	0	0	0	8	1085	0	0	680	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	680	0	167	0	0	0	8	1085	0	0	680	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Final Volume:	680	0	167	0	0	0	8	1085	0	0	680	0

Saturation Flow Module:

	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	0.00	1.00	0.00	0.00	0.00	1.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	3150	0	1750	0	0	0	1750	3800	1750	0	3800	1750

Capacity Analysis Module:

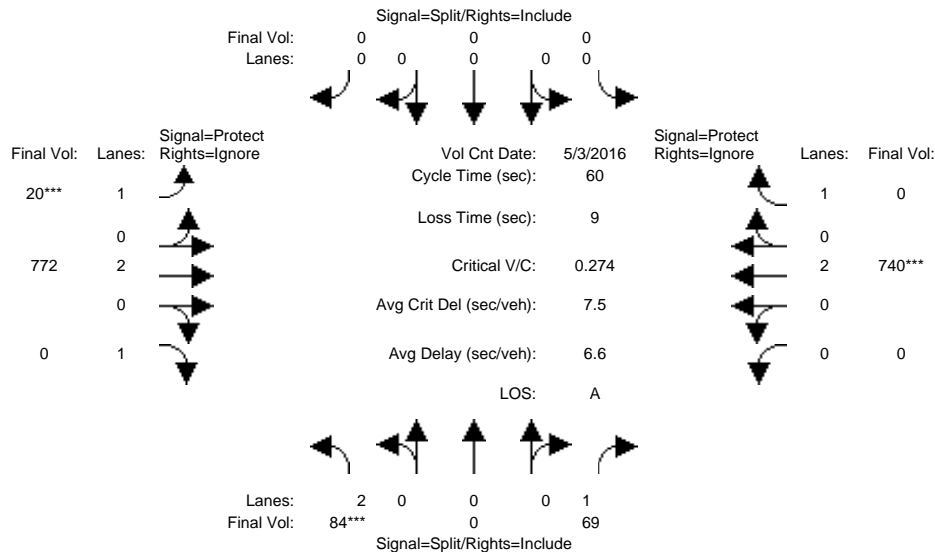
	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.22	0.00	0.10	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.18	0.00
Crit Moves:	****						****		****			
Green Time:	22.0	0.0	22.0	0.0	0.0	0.0	0.7	29.0	0.0	0.0	28.3	0.0
Volume/Cap:	0.59	0.00	0.26	0.00	0.00	0.00	0.38	0.59	0.00	0.00	0.38	0.00
Delay/Veh:	17.6	0.0	14.3	0.0	0.0	0.0	74.3	12.6	0.0	0.0	10.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	17.6	0.0	14.3	0.0	0.0	0.0	74.3	12.6	0.0	0.0	10.8	0.0
LOS by Move:	B	A	B	A	A	A	E	B	A	A	B	A
HCM2k95thQ:	13	0	5	0	0	0	2	14	0	0	9	0

Note: Queue reported is the number of cars per lane.

644 & 675 Piercy Road Industrial  
San Jose, CA  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report  
2000 HCM Operations (Future Volume Alternative)  
Existing PM

# Intersection #3860: 101/BERNAL (E)



Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Min. Green: 10 0 10 0 0 0 0 10 10 0 10 10  
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Volume Module: >> Count Date: 3 May 2016 << 5:00-6:00PM (growth rate applied to count)

	North Bound	South Bound	East Bound	West Bound
Base Vol:	84 0 69	0 0 0	20 772 789	0 740 242
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	84 0 69	0 0 0	20 772 789	0 740 242
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0
Initial Fut:	84 0 69	0 0 0	20 772 789	0 740 242
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 0.00	1.00 1.00 0.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 0.00	1.00 1.00 0.00
PHF Volume:	84 0 69	0 0 0	20 772 0	0 740 0
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	84 0 69	0 0 0	20 772 0	0 740 0
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 0.00	1.00 1.00 0.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 0.00	1.00 1.00 0.00
FinalVolume:	84 0 69	0 0 0	20 772 0	0 740 0

Saturation Flow Module:

	North Bound	South Bound	East Bound	West Bound
Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.83 1.00 0.92	0.92 1.00 0.92	0.92 1.00 0.92	0.92 1.00 0.92
Lanes:	2.00 0.00 1.00	0.00 0.00 0.00	1.00 2.00 1.00	0.00 2.00 1.00
Final Sat.:	3150 0 1750	0 0 0	1750 3800 1750	0 3800 1750

Capacity Analysis Module:

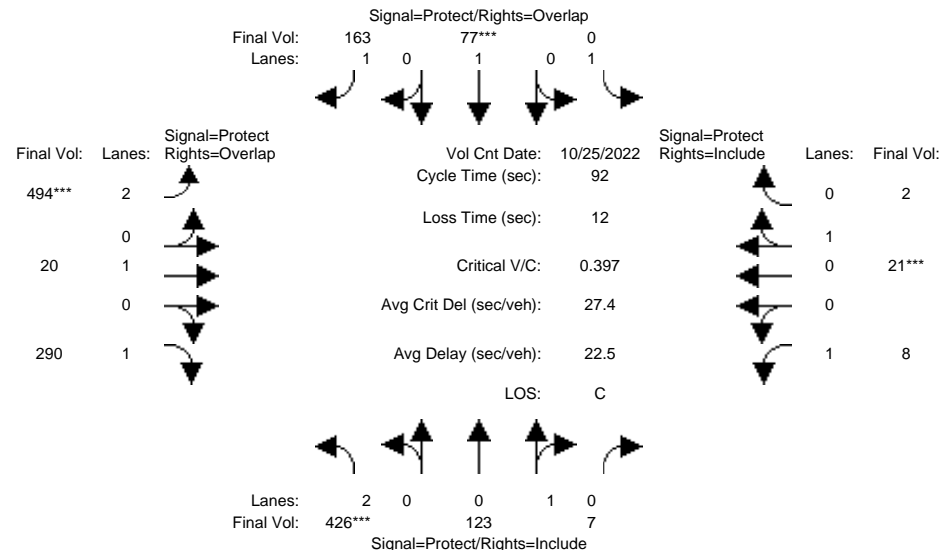
	North Bound	South Bound	East Bound	West Bound
Vol/Sat:	0.03 0.00 0.04	0.00 0.00 0.00	0.01 0.20 0.00	0.00 0.19 0.00
Crit Moves:	****	****	****	****
Green Time:	10.0 0.0 10.0	0.0 0.0 0.0	2.3 41.0 0.0	0.0 38.7 0.0
Volume/Cap:	0.16 0.00 0.24	0.00 0.00 0.00	0.30 0.30 0.00	0.00 0.30 0.00
Delay/Veh:	22.1 0.0 23.6	0.0 0.0 0.0	39.4 4.1 0.0	0.0 5.0 0.0
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
AdjDel/Veh:	22.1 0.0 23.6	0.0 0.0 0.0	39.4 4.1 0.0	0.0 5.0 0.0
LOS by Move:	C A C	A A A	D A A	A A A
HCM2k95thQ:	2 0 3	0 0 0	2 6 0	0 7 0

Note: Queue reported is the number of cars per lane.

644 & 675 Piercy Road Industrial  
San Jose, CA  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report  
2000 HCM Operations (Future Volume Alternative)  
Existing AM

# Intersection #3919: BASKING RIDGE/SILICON VALLEY



Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Min. Green: 7 10 10 7 10 10 7 10 10 7 10 10  
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Volume Module: >> Count Date: 25 Oct 2022 << 7:40 - 8:40 AM

	North Bound			South Bound			East Bound			West Bound		
Base Vol:	426	123	7	0	77	163	494	20	290	8	21	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	426	123	7	0	77	163	494	20	290	8	21	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	426	123	7	0	77	163	494	20	290	8	21	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	426	123	7	0	77	163	494	20	290	8	21	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	426	123	7	0	77	163	494	20	290	8	21	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	426	123	7	0	77	163	494	20	290	8	21	2

Saturation Flow Module:

	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.95	0.95
Lanes:	2.00	0.95	0.05	1.00	1.00	1.00	2.00	1.00	1.00	1.00	0.91	0.09
Final Sat.:	3150	1703	97	1750	1900	1750	3150	1900	1750	1750	1643	157

Capacity Analysis Module:

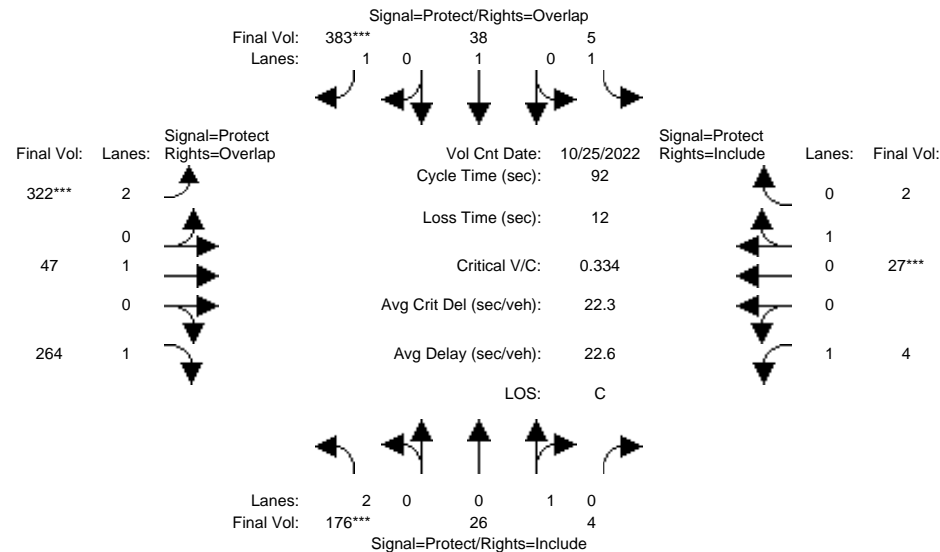
	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.14	0.07	0.07	0.00	0.04	0.09	0.16	0.01	0.17	0.00	0.01	0.01
Crit Moves:	****			****			****			****		
Green Time:	27.8	37.8	37.8	0.0	10.0	42.2	32.2	24.8	52.6	17.4	10.0	10.0
Volume/Cap:	0.45	0.18	0.18	0.00	0.37	0.20	0.45	0.04	0.29	0.02	0.12	0.12
Delay/Veh:	27.4	17.7	17.7	0.0	43.2	15.4	24.4	24.9	10.8	30.5	38.2	38.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.4	17.7	17.7	0.0	43.2	15.4	24.4	24.9	10.8	30.5	38.2	38.2
LOS by Move:	C	B	B	A	D	B	C	C	B	C	D	D
HCM2k95thQ:	12	5	5	0	5	6	12	1	9	1	2	2

Note: Queue reported is the number of cars per lane.

644 & 675 Piercy Road Industrial  
San Jose, CA  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report  
2000 HCM Operations (Future Volume Alternative)  
Existing PM

# Intersection #3919: BASKING RIDGE/SILICON VALLEY



Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Min. Green: 7 10 10 7 10 10 7 10 10 7 10 10  
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Volume Module: >> Count Date: 25 Oct 2022 << 04:45 PM - 05:45 PM

Base Vol:	176	26	4	5	38	383	322	47	264	4	27	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	176	26	4	5	38	383	322	47	264	4	27	2
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	176	26	4	5	38	383	322	47	264	4	27	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	176	26	4	5	38	383	322	47	264	4	27	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	26	4	5	38	383	322	47	264	4	27	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	176	26	4	5	38	383	322	47	264	4	27	2

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.95	0.95
Lanes:	2.00	0.87	0.13	1.00	1.00	1.00	2.00	1.00	1.00	1.00	0.93	0.07
Final Sat.:	3150	1560	240	1750	1900	1750	3150	1900	1750	1750	1676	124

Capacity Analysis Module:

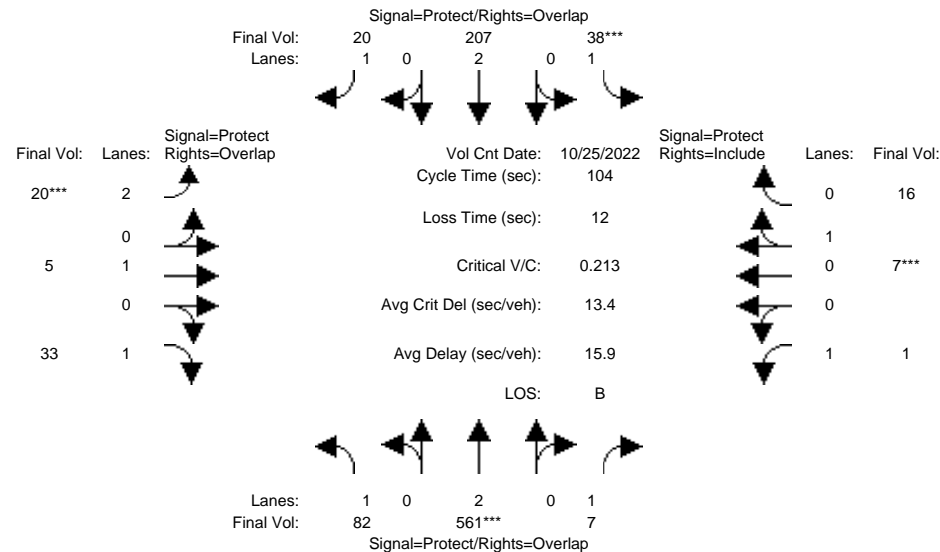
Vol/Sat:	0.06	0.02	0.02	0.00	0.02	0.22	0.10	0.02	0.15	0.00	0.02	0.02
Crit Moves:	****					****	****			****		
Green Time:	14.2	25.9	25.9	18.1	29.7	55.8	26.0	21.2	35.4	14.8	10.0	10.0
Volume/Cap:	0.36	0.06	0.06	0.01	0.06	0.36	0.36	0.11	0.39	0.01	0.15	0.15
Delay/Veh:	36.9	24.4	24.4	29.8	21.7	10.1	27.5	28.4	22.2	32.5	38.7	38.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	36.9	24.4	24.4	29.8	21.7	10.1	27.5	28.4	22.2	32.5	38.7	38.7
LOS by Move:	D	C	C	C	C	B	C	C	C	C	D	D
HCM2k95thQ:	6	2	2	0	2	12	9	3	11	0	2	2

Note: Queue reported is the number of cars per lane.

644 & 675 Piercy Road Industrial  
San Jose, CA  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report  
2000 HCM Operations (Future Volume Alternative)  
Existing AM

## Intersection #3949: HELLYER/PIERCY



Approach: North Bound South Bound East Bound West Bound  
Movement: L - T - R L - T - R L - T - R L - T - R

Min. Green: 7 10 10 7 10 10 7 10 10 7 10 10  
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Volume Module: >> Count Date: 25 Oct 2022 << 7:40 -8:40 AM

Base Vol:	82	561	7	38	207	20	20	5	33	1	7	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	82	561	7	38	207	20	20	5	33	1	7	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	82	561	7	38	207	20	20	5	33	1	7	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	82	561	7	38	207	20	20	5	33	1	7	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	561	7	38	207	20	20	5	33	1	7	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	82	561	7	38	207	20	20	5	33	1	7	16

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	0.95	0.95
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	0.30	0.70
Final Sat.:	1750	3800	1750	1750	3800	1750	3150	1900	1750	1750	548	1252

Capacity Analysis Module:

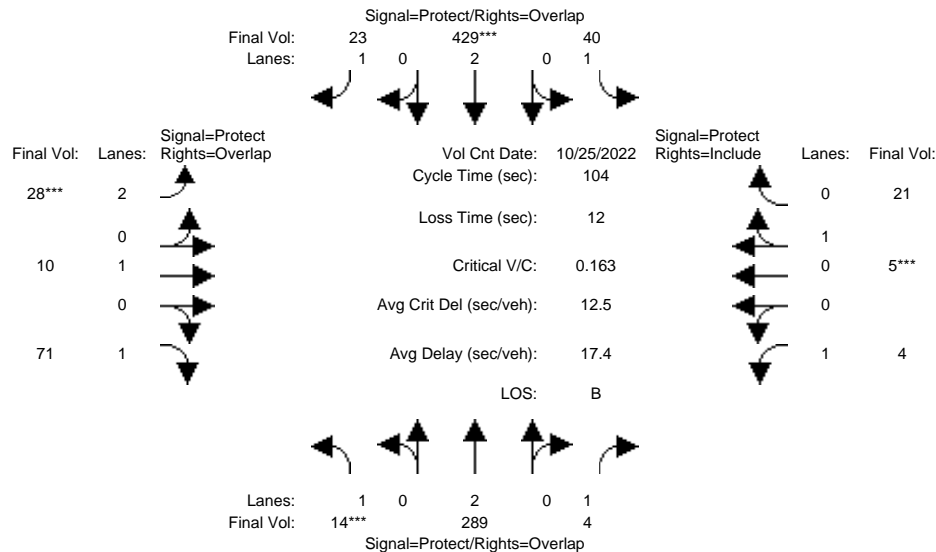
Vol/Sat:	0.05	0.15	0.00	0.02	0.05	0.01	0.01	0.00	0.02	0.00	0.01	0.01
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	30.9	65.4	72.4	9.6	44.1	51.1	7.0	10.0	40.9	7.0	10.0	10.0
Volume/Cap:	0.16	0.23	0.01	0.23	0.13	0.02	0.09	0.03	0.05	0.01	0.13	0.13
Delay/Veh:	27.6	8.6	4.8	47.2	18.4	13.7	46.4	42.9	19.7	45.4	44.6	44.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	27.6	8.6	4.8	47.2	18.4	13.7	46.4	42.9	19.7	45.4	44.6	44.6
LOS by Move:	C	A	A	D	B	B	D	D	B	D	D	D
HCM2k95thQ:	5	8	0	3	4	1	1	0	2	0	2	2

Note: Queue reported is the number of cars per lane.

644 & 675 Piercy Road Industrial  
San Jose, CA  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report  
2000 HCM Operations (Future Volume Alternative)  
Existing PM

## Intersection #3949: HELLYER/PIERCY



Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Min. Green: 7 10 10 7 10 10 7 10 10 7 10 10

Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0

Volume Module: >> Count Date: 25 Oct 2022 << 04:35 PM - 04:50 PM

Base Vol: 14 289 4 40 429 23 28 10 71 4 5 21

Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

Initial Bse: 14 289 4 40 429 23 28 10 71 4 5 21

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0

PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0

Initial Fut: 14 289 4 40 429 23 28 10 71 4 5 21

User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

PHF Volume: 14 289 4 40 429 23 28 10 71 4 5 21

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Reduced Vol: 14 289 4 40 429 23 28 10 71 4 5 21

PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

FinalVolume: 14 289 4 40 429 23 28 10 71 4 5 21

Saturation Flow Module:

Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900

Adjustment: 0.92 1.00 0.92 0.92 1.00 0.92 0.83 1.00 0.92 0.92 0.95 0.95

Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 2.00 1.00 1.00 1.00 0.19 0.81

Final Sat.: 1750 3800 1750 1750 3800 1750 3150 1900 1750 1750 346 1454

Capacity Analysis Module:

Vol/Sat: 0.01 0.08 0.00 0.02 0.11 0.01 0.01 0.01 0.04 0.00 0.01 0.01

Crit Moves: \*\*\*\* \*\*\*\* \*\*\*\*

Green Time: 7.0 44.1 51.1 30.9 68.0 75.0 7.0 10.0 17.0 7.0 10.0 10.0

Volume/Cap: 0.12 0.18 0.00 0.08 0.17 0.02 0.13 0.05 0.25 0.03 0.15 0.15

Delay/Veh: 47.7 18.9 13.5 26.6 7.2 4.1 46.9 43.3 40.0 45.9 44.9 44.9

User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00

AdjDel/Veh: 47.7 18.9 13.5 26.6 7.2 4.1 46.9 43.3 40.0 45.9 44.9 44.9

LOS by Move: D B B C A A D D D D D

HCM2k95thQ: 1 6 0 2 6 1 2 1 5 0 2 2

Note: Queue reported is the number of cars per lane.