Appendix I

Transportation Analysis

469 Piercy Road Development

Transportation Analysis
Final Submittal

PRE20-116
3-15106

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Prepared for

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

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EXECUTIVE SUMMARY

This transportation study evaluates transportation operations and site circulation conditions for the proposed 469 Piercy Road project in the City of San José. The project site is in the area bounded by Hellyer Avenue and Piercy Road. The Project's site plan proposes to construct a warehouse totaling up to 134,605 total square-feet of building area on the 5.93 gross acre site. The project would redevelop the existing site which is currently vacant. The proposed site would provide up to 86 car parking spaces, 10 bicycle parking spaces, and 15 truck loading docks on-site. The site will be accessed from one (1) driveway along Hellyer Avenue and one (1) driveway along Piercy Road.

The potential adverse effects of the project were evaluated in accordance with the standards and methodologies set forth by the City of San José. Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the 2020 Transportation Analysis Handbook, the transportation analysis report for the project includes a CEQA transportation analysis (TA) and a local transportation analysis (LTA). The CEQA transportation analysis comprises an evaluation of Vehicle Miles Traveled (VMT) which is defined in Chapter 1. The LTA supplements the CEQA transportation analysis by identifying transportation operational issues via an evaluation of weekday AM and PM peak-hour traffic conditions for six (6) study intersections near the project site. The LTA also includes an analysis of site access, on-site circulation, parking, vehicle queuing, and effects to transit, bicycle, and pedestrian access.

CEQA Transportation Analysis

Project Vehicle Miles Traveled (VMT) Impacts and Mitigation Measures

The project consists of industrial land use and does not meet the screening criteria for VMT analysis exemption as a small infill project of 30,000 square-feet of total gross floor area or less per City guidelines. The proposed project was evaluated in the VMT tool assuming development of 134,605 square-feet of industrial use.

The City's VMT per employee threshold for industrial land uses is 14.37. For the surrounding land use area, the existing VMT is 14.67. The proposed project (APN 678-93-039) is anticipated to generate a VMT per employee of 14.62 (excluding any VMT reduction strategies). The evaluation tool estimates that the project would exceed the City's industrial VMT per employee threshold and would trigger a VMT impact.

Since the project VMT exceeds the industrial thresholds of significance, the project will need to mitigate its CEQA transportation impact by implementing a variety of City approved VMT reduction strategies. Per City direction, the applicant would implement Tier 2 multi-modal infrastructure improvements, and with these measures, the project could achieve a VMT per employee of 14.31 which is below the City threshold. Final implementation of the proposed VMT reduction strategies would need to be coordinated between the project applicant and the City.

The project would exceed the City's industrial VMT per employee threshold and would need to implement the following VMT reduction strategies to mitigate the impact and improve multi-modal access per City request:

- Construct raised crosswalks at the intersection corners of Silver Creek Valley Road / Piercy Road. Potential civil improvements such as drainage, signal, and utility modifications would be needed to implement the raised crosswalk for VMT mitigation.

- Install Class IV protected bike lanes along the project frontage as well as Piercy Road from Hellyer Avenue to Silver Creek Valley Road per City of San Jose Better Bike Plan 2025. The project will be required to provide a monetary in-lieu fee contribution of $141 per linear foot (LF) for the Class IV protected bike lane along the Hellyer Avenue project frontage.

Local Transportation Analysis

Project Trip Generation

Trip generation for the proposed project land uses was calculated using average trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* (September 2021).

Per the 2020 *Transportation Analysis Handbook*, trip generation reduction credits were applied to the project including location-based mode-share, potential VMT reduction strategies, and existing land uses. Development of the proposed project with all applicable trip reductions and credits is anticipated to generate a net new total of 213 additional daily trips, 23 AM, and 21 PM peak hour trips to the roadway network.

Intersection Traffic Operations

It should be noted that the project is located in the Edenvale Area Development Policy (EADP) boundary. A prior traffic study (iStar Mixed-Use Development) was completed for the EADP and identified intersection improvements that have already been completed. Based on City direction and the 2014 EADP Update, the project is not required to study any signalized intersections and their adverse effects under project conditions. For informational purposes, intersection level of service operations analysis is shown for Existing, Background, and Cumulative Conditions.

Existing AM and PM peak-hour traffic volumes, intersection geometry, and traffic control were based on City of San Jose traffic database (Pre-COVID conditions) with a 1% compound growth rate applied at the study intersections. Year 2022 traffic count data was also collected but these counts yielded fewer traffic volumes than the Pre-COVID counts. Per City direction, the Pre-COVID counts applied with a growth factor was used to provide a conservative analysis. The study intersections were assessed under Existing, Background and Cumulative scenarios. City of San José and Valley Transportation Authority Congestion Management Program intersection level of service standards and significance thresholds were used to determine adverse effects caused by the project.

Adverse Effects and Improvements

The project is not anticipated to generate an adverse effect to the study intersections.

Per City request to improve multi-modal access, the project would need to coordinate with the City and implement the following improvements for VMT mitigation:

- Construct raised crosswalks at the intersection corners of Silver Creek Valley Road / Piercy Road. Potential civil improvements such as drainage, signal, and utility modifications would be needed to implement the raised crosswalk for VMT mitigation.

- Install Class IV protected bike lanes along the project frontage as well as Piercy Road from Hellyer Avenue to Silver Creek Valley Road per City of San Jose Better Bike Plan 2025. The project will be required to provide a monetary in-lieu fee contribution of $141 per linear foot (LF) for the Class IV protected bike lane along the Hellyer Avenue project frontage.

The project is located in Sub-Area 3, and per the EADP, the base maximum floor area ratio (FAR) is 0.40 for development. Based on the Project Description and latest site plan, the project site would have a FAR of 0.51 and would exceed the allowed FAR per the EADP.

To be consistent with the EADP, the project would need to pay a proportional fee contribution in accordance with the proposed project square footage and would need to be in conformance with the maximum FAR for Sub-Area 3.

Vehicle Site Access and Circulation

The site will be accessed from one (1) driveway along Hellyer Avenue and one (1) driveway along Piercy Road. Project driveways designed for truck access are 32-feet wide while passenger vehicle access driveways are 26-feet wide. Based on associated turning templates for the given design vehicle, the wider driveway dimensions proposed on the latest site plan are recommended to provide sufficient vehicle access and circulation for entering and exiting vehicles.

The proposed driveway locations optimize sight distance and spacing for the proposed site plan. Passenger vehicles, delivery trucks, refuse, and emergency vehicles are able to circulate within the project site without conflict.

Pedestrian, Bicycle, and Transit Site Access

Due to the function and operational characteristics of the proposed use, the project is not anticipated to add substantial project trips to the existing pedestrian, bicycle, or transit facilities in the area. Therefore, the project would not create an adverse effect to the existing pedestrian, bicycle, or transit facility operations.

On-Site Vehicle and Bicycle Parking

Per the City's parking standard, the project site is anticipated to provide sufficient on-site vehicle and bicycle parking to meet the City's minimum parking requirement.

Neighborhood Interface

The project's on-site parking would satisfy the City's vehicle parking standard, and the project is not anticipated to create an adverse effect to the existing parking condition in the surrounding area. The project is not anticipated to create an adverse effect to the existing pedestrian and bicycle facilities in the surrounding area.

1 INTRODUCTION

1.1 Project Description

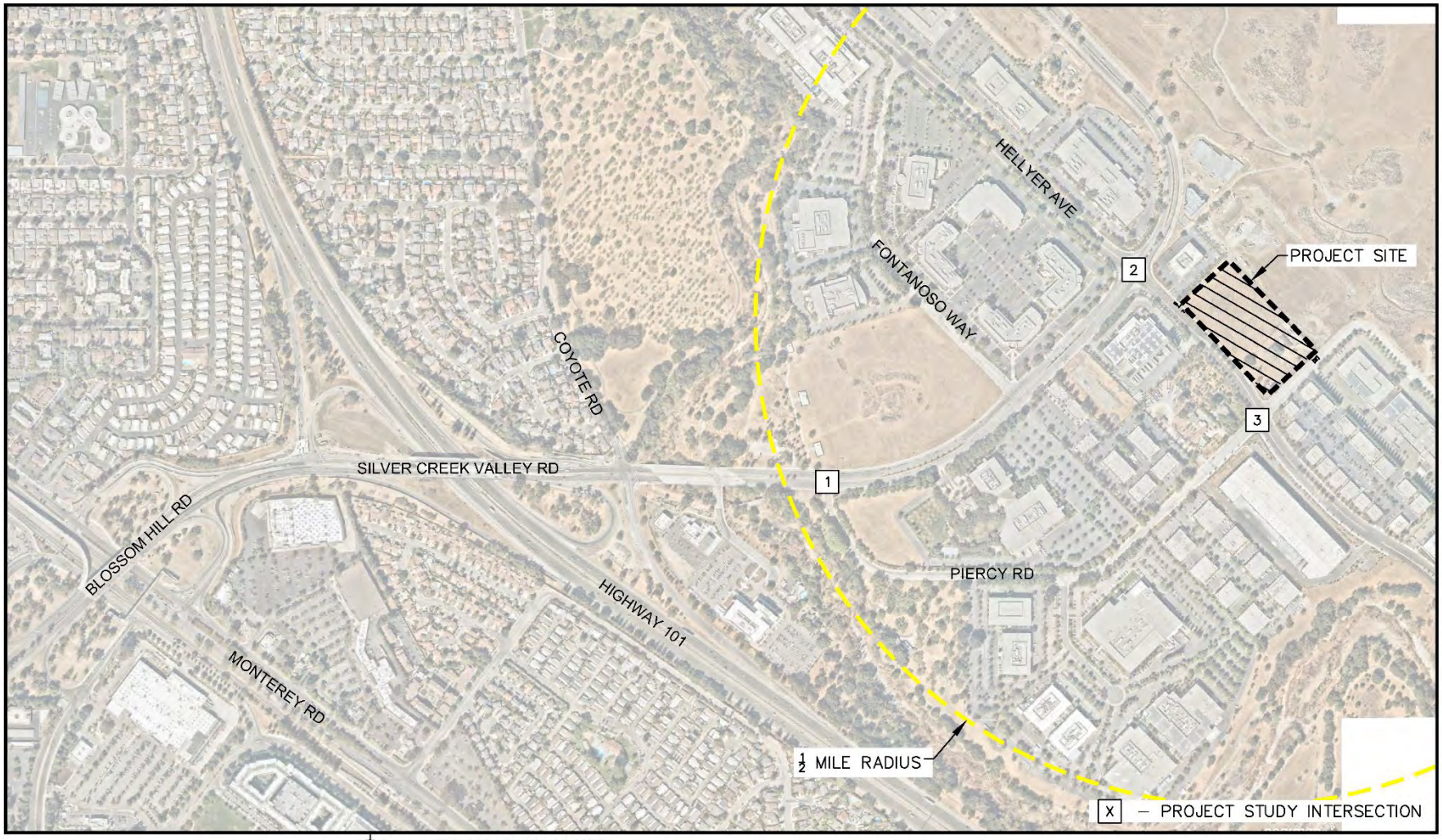
This transportation study evaluates transportation operations and site circulation conditions for the proposed 469 Piercy Road project in the City of San José. The project site is in the area bounded by Hellyer Avenue and Piercy Road. The Project's site plan proposes to construct a warehouse totaling up to 134,605 total square-feet of building area on the 5.93 gross acre site. The project would redevelop the existing site which is currently vacant.

The proposed site would provide up to 86 car parking spaces, 10 bicycle parking spaces, and 15 truck loading docks on-site. The site will be accessed from one (1) driveway along Hellyer Avenue and one (1) driveway along Piercy Road.

An overview map showing the project site location is shown in **Figure 1**. Kimley-Horn was retained by the project applicant to provide a traffic operations analysis for the proposed project based on the scope of work approved by the City of San José.

Based on the recently adopted Transportation Analysis Council Policy 5-1, the project will require preparation of a comprehensive Transportation Analysis (TA) per the 2020 San Jose Transportation Analysis Handbook. This TA report evaluates several project and transportation criteria including intersection operations, project trip generation, trip distribution, site access and circulation, sight distance, vehicle queuing, parking, bicycle, pedestrian, and transit facilities, and vehicle miles traveled (VMT).

Figure 1: Project Site Map



1.2 CEQA Transportation Analysis Scope

The California Environmental Quality Act (CEQA) was enacted in 1970 to ensure environmental protection through review of discretionary actions approved by all public agencies. For the City of San Jose, a CEQA transportation analysis requires an evaluation of a project's potential impacts related to VMT and other significance criteria per CEQA and Senate Bill 743.

VMT is defined as the total miles of travel by a personal motorized vehicle a project is expected to generate in a day. VMT is calculated using the Origin-Destination VMT method which measures the full distance of personal motorized vehicle-trips with one end within the project. A project's VMT is compared to the appropriate thresholds of significance based on the project location and type of development. For 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. For an office or industrial project, the project's VMT is divided by the number of employees to determine the VMT per employee. The project's VMT is then compared to the VMT thresholds of significance established based on the average area VMT. A project located in a downtown area with higher density and a diversity of land uses is expected to have a lower project VMT than a project located in a suburban area.

Screening Criteria

The Transportation Analysis Handbook 2020 includes screening criteria for projects that are expected to result in less-than-significant VMT impacts. Projects that meet the screening criteria do not require a CEQA transportation analysis but may be required to provide a Local Transportation Analysis (LTA).

The proposed project, which is a warehouse development, would not meet the industrial screening criteria set forth in the City's Transportation Analysis Handbook. The City of San Jose VMT Evaluation Tool was used to estimate VMT impacts for the project.

VMT Analysis Methodology

The City has developed the San Jose VMT Evaluation Tool to streamline the analysis for residential, office, and industrial projects with local traffic to determine whether a project would result in CEQA transportation impacts related to VMT. The City's Travel Demand Model can also be used to determine project VMT for non-residential or non-office projects, very large projects, or projects that can potentially shift travel patterns.

For this project, the CEQA transportation analysis was assessed using the San Jose VMT Evaluation Tool to determine the potential VMT impact from the project's description, location, land use attributes.

The project's VMT was compared to the City's existing level VMT and VMT thresholds of significance as established in Council Policy 5-1. Project VMT that exceeds the thresholds of significance will need to mitigate its CEQA transportation impact by implementing various VMT reduction strategies described below.

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.

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 should be enforced through annual trip monitoring to assess the project's status in meeting the VMT reduction goals.

City of San Jose VMT Threshold

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. **Table 1** summarizes the City VMT thresholds of significance for development projects. For residential developments, project generated VMT that exceeds the existing citywide average VMT per capita minus fifteen (15) percent will create a significant adverse impact. For office developments, project generated VMT that exceeds the existing regional average VMT per employee minus fifteen (15) percent will also create a significant adverse impact. This project is an industrial use; therefore, the project VMT per employee exceeds existing regional average VMT per employee will create a significant adverse impact.

Figure 2 and **Figure 3** shows San Jose heat maps identifying existing level VMT per capita for residential uses and VMT per employee for office and industrial uses respectively in the city. Developments in green-colored areas are estimated to have VMT levels below the City's threshold of significance while orange and pink-colored areas are estimated to have VMT levels above the threshold of significance.

Table 1: City of San Jose VMT Thresholds of Significance

Project Type	Significance Criteria	Current VMT Level	VMT Threshold
Residential Uses	Project VMT per capita exceeds existing citywide average VMT per capita minus 15 percent, or existing regional average VMT per capita minus 15 percent, whichever is lower.	11.91 VMT per Capita (Citywide Average)	10.12 VMT per Capita
General Employment Uses	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
Industrial Employment Uses	Project VMT per employee exceeds existing regional average VMT per employee.	14.37 VMT per employee (Regional Average)	14.37 VMT per employee
Retail / Hotel / School Uses	Net increase in existing regional total VMT.	Regional Total VMT	Net Increase
Public / Quasi-Public Uses	In accordance with most appropriate type(s) as determined by Public Works Director.	Appropriate levels listed above	Appripriate thresholds listed above
Mixed Uses	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	Appripriate thresholds listed above
Change of Use / Additions to Existing Development	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	Appripriate thresholds listed above
Area Plans	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	Appripriate thresholds listed above
Notes:			
VMT thresholds based on City of San Jose, 2018 Transportation Analysis Handbook, Table 2.			

Figure 2: VMT Per Capita Heat Map for Residential Uses

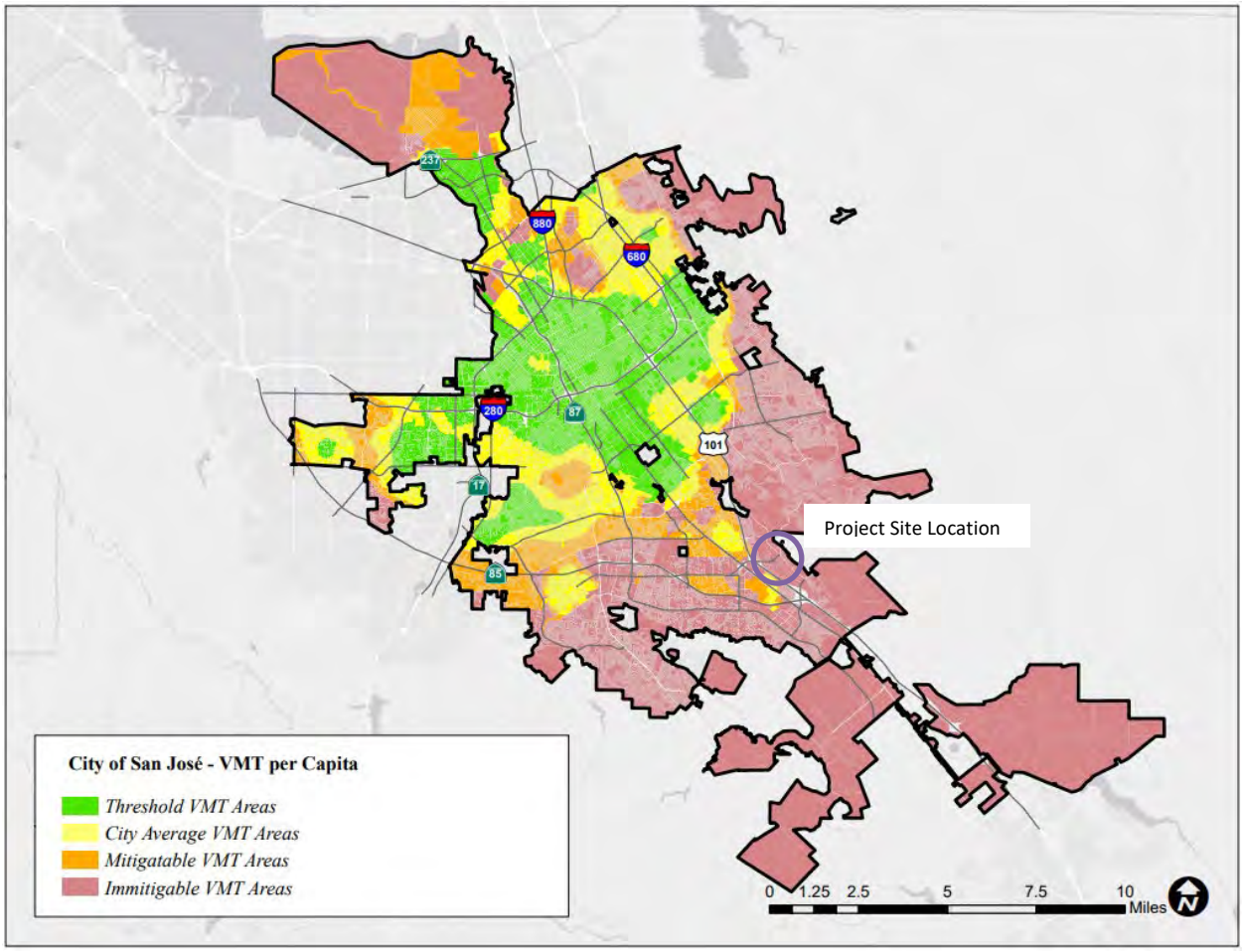
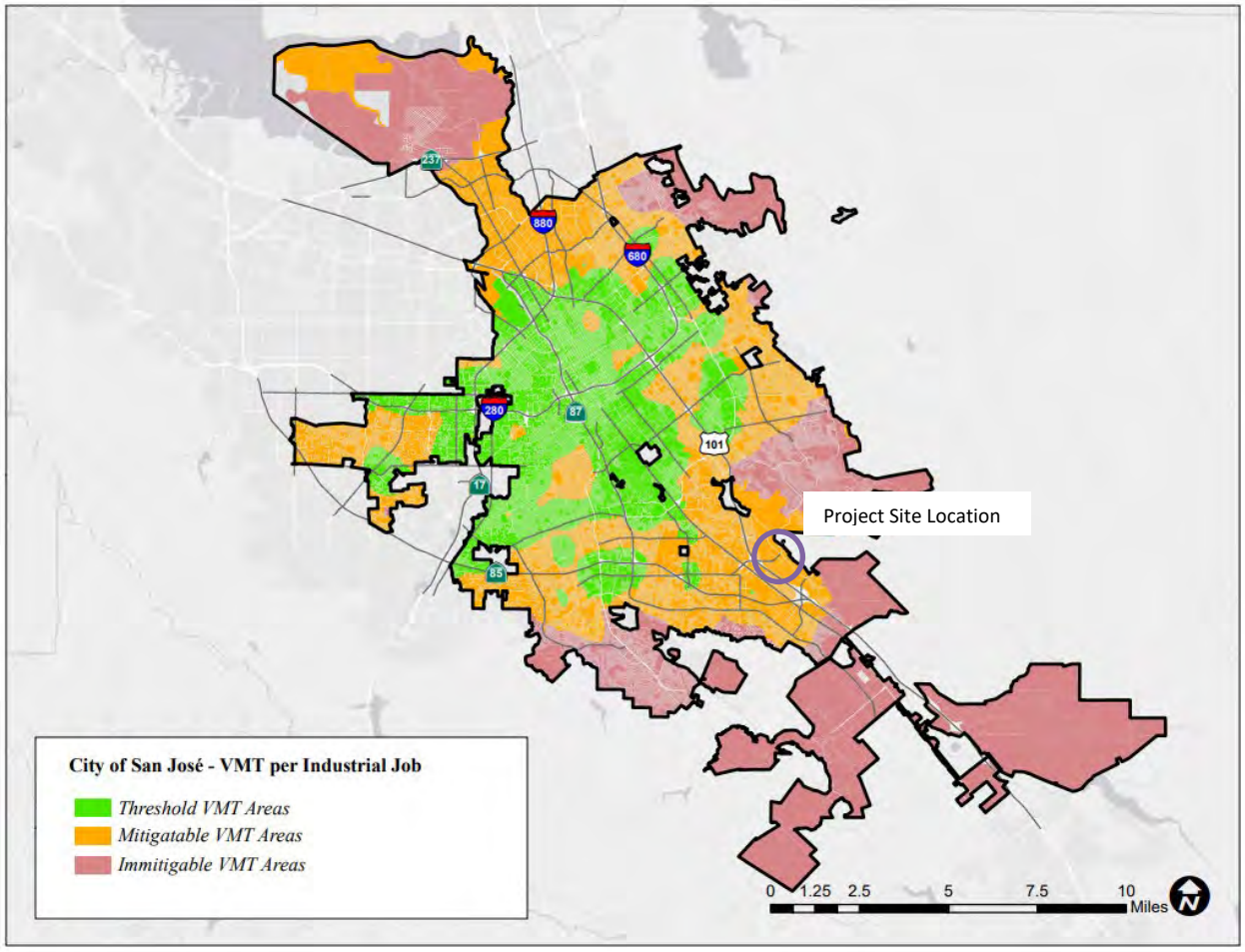


Figure 3: VMT Per Employee Heat Map for Industrial Uses



1.3 Local Transportation Analysis Scope

A Local Transportation Analysis (LTA) evaluates the effects of a development project on transportation, access, circulation, and related safety elements in the proximate area of the project. A LTA also establishes consistency with the General Plan policies and goals through the following three objectives:

1. Ensures that a local transportation system is appropriate for serving the types, characteristics, and intensity of the surrounding land uses;
2. Encourages projects to reduce personal motorized vehicle-trips and increase alternative transportation mode share;
3. Addresses issues related to operation and safety for all transportation modes, with trade-offs guided by the General Plan street typology.

For this project, the LTA was assessed per the guidelines established in the 2020 San Jose Transportation Analysis Handbook and Transportation Analysis work scope for 469 Piercy Road Warehouse dated January 28, 2022.

The LTA study to identify potential traffic adverse effects was evaluated per the standards and guidelines set forth by the City of San Jose and the Santa Clara Valley Transportation Authority (VTA) which administers the County Congestion Management Program (CMP). A project is required to conduct

an intersection operations analysis if the project is expected to add ten (10) or more vehicle trips per peak hour per lane to a signalized intersection that is located within half a mile of the project site. Study intersections for the project were selected in consultation with City staff and in accordance with the VTA's TIA Guidelines. The following three (3) intersections studied in this TA are listed below.

1. Silver Creek Valley Road / Piercy Road
2. Silver Creek Valley Road / Hellyer Avenue
3. Hellyer Avenue / Piercy Road

Study Scenarios

Traffic conditions for each study intersection were analyzed during the 7:00 – 9:00 AM and 4:00 – 6:00 PM peak hours of traffic which represent the most heavily congested traffic on a typical weekday. The study intersections were assessed under the following study scenarios.

- **Existing Conditions**: Existing AM and PM peak-hour traffic volumes, intersection geometry, and traffic control based on City of San Jose traffic database (Pre-COVID conditions) with a 1% compound growth rate applied at the study intersections. Year 2022 traffic count data was also collected but these counts yielded fewer traffic volumes than the Pre-COVID counts. Per City direction, the Pre-COVID counts applied with a growth factor was used to provide a conservative analysis.

- **Background Conditions**: Peak-hour traffic volumes based on Existing conditions and adding City Approved Trip Inventory (ATI) traffic volumes from City of San Jose database to the Existing roadway geometry and traffic control. The ATI volumes represent approved but not yet constructed developments in the vicinity of the project study area.

- **Background Plus Project Conditions**: Peak-hour traffic volumes based on Background conditions and adding the net vehicle trips from the proposed Silver Creek project to the Background roadway geometry and traffic control. The Project scenario is compared to the Background conditions for determining project traffic adverse effects.

- **Cumulative Conditions**: Peak-hour traffic volumes based on Background Plus Project conditions and adding pending project traffic volumes identified by the City to the Background roadway geometry and traffic control. The pending projects represent planned but not yet approved developments in the vicinity of the project study area.

Intersection Level-of-Service Criteria and Thresholds

Analysis of potential adverse effects at roadway intersections is based on the concept of level-of-service (LOS). The LOS of an intersection is a qualitative measure used to describe operational conditions. LOS A (best) represents minimal delay, while LOS F (worst) represents heavy delay and a facility that is operating at or near its functional capacity. LOS for this study was based on the Highway Capacity Manual (HCM) 2000 methodology with TRAFFIX software. This methodology is used by the City of San Jose for CMP-designated intersections and determining average intersection vehicle delay measured in seconds. The City of San Jose does not have any formally adopted LOS standard for unsignalized intersections; LOS would generally only be used to determine the need for modification in the type of intersection control. The standards used by the City of San Jose to measure signalized intersection operations are summarized below in **Table 2**.

Table 2: Intersection Operation Standards at Signalized Intersections

Operations Standard	Descriptions	Average Control Delay (seconds/vehicle)
A	Operations with very low delay occurring with favorable progress and/or short cycle lengths.	10.0 or less
B	Operations with low delay occurring with good progression and/or short cycle lengths.	Between 10.1 and 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	Between 20.1 and 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.	Between 35.1 and 55.0
E	Operations with high delays indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	Between 55.1 and 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	Higher than 80.0

Project adverse effects are determined by comparing baseline conditions to those scenarios with the proposed Project. Adverse effects for intersections are created when traffic from the proposed Project causes the LOS to fall below the maintaining agency's LOS threshold or causes deficient intersections to deteriorate further, per the criteria indicated below.

City of San Jose LOS Threshold

The City's acceptable intersection operations standard is LOS "D" unless superseded by an Area Development Policy. An adverse effect on intersection operations occurs when the analysis demonstrates that a project would cause the operations standard at a study intersection to fall below LOS "D" with the addition of project vehicle-trips to baseline conditions.

For intersections already operating at LOS "E" or LOS "F" under the baseline conditions, an adverse effect is defined as:

- An increase in average critical delay by 4.0 seconds or more AND an increase in the critical volume-to-capacity (V/C) ratio of 0.010 or more; OR
- A decrease in average critical delay AND an increase in the critical V/C ratio of 0.010 or more.

CMP Intersection LOS Threshold

The County's operations standard for a CMP identified intersection is LOS "E". A project is anticipated to create a significant adverse effect on traffic conditions at a CMP signal if:

- LOS at the intersection degrades from and acceptable LOS "E" or better under baseline conditions to an unacceptable LOS F under baseline plus project conditions; OR
- LOS at the intersection is an unacceptable LOS "F" under baseline conditions and the addition of project trips causes both the critical-movement delay at the intersection to increase by four (4) or more seconds AND the volume-to-capacity ratio (V/C) to increase by one percent (0.01) or more.

1.4 Report Organization

This report includes a total of six (6) chapters as follows:

- **Chapter 2** describes existing transportation conditions including VMT of the existing land uses in the proximity of the project, the existing roadway network, transit service, bicycle, and pedestrian facilities.
- **Chapter 3** describes the CEQA transportation analysis, including the project VMT impact analysis.
- **Chapters 4, 5, and 6** describe the local transportation analysis including operations of study intersections, the methods used to estimate project-generated traffic, the project's effects on the transportation system, and an analysis of other transportation issues including site access and circulation, parking, transit services, bicycle and pedestrian facilities, and neighborhood intrusion.
- **Chapter 7** provides a summary of the findings provided in the report.

2 EXISTING TRANSPORTATION CONDITIONS

This chapter describes the existing conditions of the transportation system within the study area. It presents the existing land use's vehicle miles traveled (VMT) near the project and describes transportation facilities near 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 Local Transportation Analysis (Chapters 4, 5, and 6).

2.1 Vehicle Miles Traveled

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 VMT Evaluation Tool and the project's APN, the existing VMT for industrial employment uses in the project vicinity is 14.67 per employee. The current regional average VMT for industrial employment uses is 14.37 per employee (see **Table 1**). Thus, the VMT levels of existing employment uses in the project vicinity are above the average VMT levels. Chapter 3 presents additional information on the project's VMT.

2.2 Existing Roadway Network

The following local and regional roadways provide access to the project site:

Hellyer Avenue is a four-lane arterial that provides access to the project site as well as various commercial and industrial businesses between Silicon Valley Boulevard and Highway 101 in the north-south direction. West of Highway 101, Hellyer Avenue becomes a two-lane residential collector street and terminates at Senter Avenue. The roadway is designated as a City Connector Street. Near the project site, the roadway has a posted speed limit of 40 mph, has sidewalks, and provides Class II bike lanes on both sides of the street.

Piercy Road is a two-lane collector street in the north-south direction that provides access the project as well as to various commercial and industrial businesses between Silver Creek Valley Road and Hellyer Avenue. The roadway provides sidewalks but does not have bike facilities on both sides of the street.

Silver Creek Valley Road is a divided arterial in the east-west direction between Highway 101 and Yerba Buena Road. Near the project site, Silver Creek Valley Road is a six-lane facility with a raised median and provides direct access to commercial and industrial businesses. On-street parking is prohibited along Silver Creek Valley Road and the posted speed limit is 45mph. The road does provides sidewalks and Class II bike lanes with direct access to the Coyote Creek Trail for multi-modal access.

Blossom Hill Road (County Route G10) is a divided arterial in the east-west direction between Highway 101 in San Jose and Santa Cruz Avenue in Los Gatos. Near the project site, Blossom Hill Road is a six-lane facility with a raised median. On-street parking is prohibited along Blossom Hill Road and the overcrossing bridge at Highway 101 is currently being expanded with additional travel lanes and a Class I separated shared use path.

Fontanoso Way is a two-lane collector street in the north-south direction that provides access to various commercial and industrial businesses between Silver Creek Valley Road and Hellyer Avenue. The roadway provides sidewalks but does not have bike facilities on both sides of the street.

Monterey Road is a six-lane grand boulevard north of Blossom Hill Road and a four-lane major arterial south of Blossom Hill Road. Monterey Road extends from Market Street in downtown San Jose to Highway 101 south of the City of Gilroy. Within the project vicinity, Monterey Road runs parallel to the Caltrain railroad tracks and provides access to the project site via interchanges at Blossom Hill Road. The corridor does not provide on-street parking but provides a Class II bike lane and some sidewalk facilities.

Highway 101 is an 8-lane freeway (three mixed-flow lanes and one HOV lane in each direction) that connects with State Route 85 and travels in a north-south direction in the City of San José. Access to and from the project site is provided by ramp terminals at Blossom Hill Road / Silver Creek Valley Road. The existing interchange at Blossom Hill Road is being expanded to provide additional travel lanes and roadway capacity.

2.3 Existing Pedestrian and Bicycle Facilities

Pedestrian and bicycle activity within project vicinity are active along several facilities with an established pedestrian and bicycle infrastructure. Connected sidewalks at least six feet wide are available on at least one side of all major City roadways in the study area with adequate lighting and signing. At signalized intersections, marked crosswalks, Americans with Disabilities Act (ADA) standard curb ramps, and count down pedestrian signals provide improved pedestrian visibility and safety.

The Coyote Creek trail is a Class I shared use pathway and one of the longest trail systems extending from the Bay to the City's southern boundary. The trail runs parallel to Coyote Creek and provides both pedestrian and bicycle access to the project site. At the intersection of Silver Creek Valley Road and Piercy Road, a grade-separated undercrossing and crosswalk facilities are present for pedestrian and bike connectivity to the Coyote Creek trail.

Bicycle facilities in the area include Silver Creek Valley Road, Blossom Hill Road, Hellyer Avenue, and Monterey Road which consist of Class II bike lanes with buffered striping to separate the vehicle and bike travel way. Most of these corridors feature green paint markings in potential conflict areas at the signalized intersections. Bicycle parking in the area is limited to private commercial and industrial lots.

Near the project site, Silver Creek Valley Road provides sidewalk and bicycle facilities for pedestrian and bike access. Connectivity to the Coyote Creek Trail is currently provided on the northside of Silver Creek Valley Road adjacent to the project as well as on the south side with crosswalks in the east and south legs of the Silver Creek Valley Road / Piercy Road intersection. Overall, the existing pedestrian and bicycle facilities near the project have adequate connectivity and provide pedestrian and bicyclists with routes to the surrounding land uses.

The San Jose Better Bike Plan 2025 indicates that a variety of bicycle facilities are planned in the project study area and the following facility improvements would benefit the project.

- **Class I shared use path**
  - Blossom Hill Road from Monterey Road to Coyote Road
- **Class II bike lanes**
  - Piercy Road from Silver Creek Valley Road to Hellyer Avenue
- **Class IV protected bike lanes**

- Silver Creek Valley Road from US 101 to Yerba Buena Road
- Hellyer Avenue from Silicon Valley Boulevard to Senter Road
- Coyote Road from Silver Creek Valley Road to Senter Road
- Silicon Valley Boulevard / Bernal Road from Heaton Moor Drive to Hellyer Avenue

2.4 Existing Transit Facilities

Transit services in the study area include light rail, shuttles, and buses provided by the Santa Clara Valley Transportation Authority (VTA). Per the updated February 14, 2022* service schedule, the project study area is served by the following major transit routes.

- Local Bus Route 42
  - Evergreen Valley College – Santa Teresa Station
  - Local service every 30-60 minutes on weekdays and weekends
  - Nearest transit stop to project – Hellyer Avenue and Piercy Road intersection

**Note that the routes and service schedules described above are based on February 14, 2022 schedules. At the time that this report was prepared, COVID 19 had affected routes and service schedules and is not reflective of typical operations.*

Most regular bus routes operate on weekdays from early in the morning (5:00 AM to 6:00 AM) until late in the evening (10:00 PM to midnight) and on weekends from early morning (5:00 AM to 6:00 AM) until mid-evening (8:00 PM to 10:00 PM). The study area is served by bus route 42 in the VTA system which provide local and regional bus service for commuters between Evergreen College and the VTA Santa Teresa Light Rail station.

Bus stops with benches, shelters, and bus pullout amenities are not provided within ½ mile walking distance from the project site. The closest transit stops by the project are located at the Silver Creek Valley Road / Hellyer Avenue and Hellyer Avenue / Piercy Road intersections.

2.5 Existing Intersections

The traffic study to identify potential traffic adverse effects was evaluated per the standards and guidelines set forth by the City of San Jose and the Santa Clara Valley Transportation Authority (VTA) which administers the County Congestion Management Program (CMP). Study intersections for the project were selected in consultation with City staff and in accordance with the VTA's TIA Guidelines. The three (3) intersections studied in this TA are listed below.

1. Silver Creek Valley Road / Piercy Road
2. Silver Creek Valley Road / Hellyer Avenue
3. Hellyer Avenue / Piercy Road

2.6 Existing Field Observations

Field observations did not reveal any significant traffic related congestion within the project study area. There is construction at the US 101 / Blossom Hill Road interchange; however traffic disruption was not observed with the existing traffic control and detours. During the AM and PM peak hours, some traffic

queueing was observed due to the freeway ramp meters in operation at the US 101 on-ramp intersections; however, traffic on the freeway ramps did not impact operations at the signalized intersections along Blossom Hill Road and Silver Creek Valley Road.

2.7 Edenvale Area Development Policy

The project is subject to the Edenvale Area Development Policy (EADP). The EADP establishes a policy framework to guide the ongoing development of the Edenvale San José area and accomplish the following goals:

1. Manage the traffic congestion associated with near term development in the Edenvale Policy Area
2. Promote General Plan goals for economic development, particularly high technology driven industries
3. Encourage a citywide reverse commute to jobs at southerly location in San Jose
4. Provide for transit-oriented, mixed-use residential and commercial development to increase internalization of automobile trips and promote transit ridership

The EADP was adopted in June 2000 to facilitate industrial development in New Edenvale. Subsequent to its adoption, the Policy has been updated to accommodate a mix of uses including residential, commercial, and office uses and to transfer development potential/capacity from one Sub-Area to another.

With the 2006 approval of the previous iStar development proposal, 494,000 square-feet of potential industrial development was transferred for future industrial, R&D, and office development in Sub-Area 1 and Sub-Area 3. The Redevelopment Agency committed to contribute approximately $1 million to be borne proportionally by a square footage fee for allocation of up to 494,000 square-feet of industrial development at the time of approval of a development permit.

The 2007 update included the expansion of the Edenvale Area to include Sub-Area 5 which was not originally part of the Policy. Sub-Area 5 was added to the Edenvale Area because new development proposed in this Sub-Area would contribute to the previously identified significant and unavoidable impacts identified in the original EADP EIR.

The EADP was updated in April 2014 to address development anticipated in both New Edenvale and Old Edenvale on both sides of US Highway 101 including the iStar site and the Silver Creek Valley place. The New Edenvale development is 5.5 million square feet of additional industrial floor space from the date of the Policy's original approval. In order to allocate this square footage potential across the entire area of New Edenvale, the updated Policy includes a new base maximum floor area ratio (FAR) for development in Sub-Areas 1, 3, and 4.

The EADP identifies infrastructure improvements for buildout of all the properties in New Edenvale (Sub-Areas 1, 3, and 4) considered ready for development, and accounting for additional commercial and residential development in Old Edenvale (Sub-Areas 2 and 5). Per Attachment C of the EADP, the infrastructure improvements identified in Sub-Areas 1 & 3 where the project is located include:

- Silver Creek Valley Road / Piercy Road – Funded and Completed
    - Install signal

    - Add exclusive NB, EB, WB lanes
    - Extend travel lanes and left turn pockets
- Silver Creek Valley Road / Fontanoso Way – Funded and Completed
    - Install signal
    - Add exclusive NB, SB, EB, WB lanes
    - Extend travel lanes and left turn pockets
- Silver Creek Valley Road / Hellyer Avenue – Funded and Completed
    - Extend travel lanes and left turn pockets
- US 101 / Blossom Hill Road / Silver Creek Valley Road Interchange – Under Construction
    - Bridge widening to 7 lanes including construction of bridge structure over US 101

The project is located in Sub-Area 3, and per the EADP, the base maximum floor area ratio (FAR) is 0.40 for development. Based on the Project Description and latest site plan, the project site would have a FAR of 0.51 and would exceed the allowed FAR per the EADP.

To be consistent with the EADP, the project would need to pay a proportional fee contribution in accordance with the proposed project square footage and would need to be in conformance with the maximum FAR for Sub-Area 3.

3 CEQA TRANSPORTATION ANALYSIS

This chapter describes the CEQA transportation analysis, including the VMT threshold of significance, the project-level VMT impact analysis results, and the mitigation measures that are necessary to reduce a VMT impact.

3.1 Project VMT Analysis

A VMT analysis was used to evaluate the Silver Creek project VMT levels against the appropriate thresholds of significance established in Council Policy 5-1. Section 3.4 and Table 1 of the *Transportation Analysis Handbook* identifies screening criteria to exempt certain components of a project that are expected to result in a less-than significant VMT impact from the project description, characteristics, and/or location; However, the project does not satisfy the small infill screening criteria of 30,000 industrial s.f. of gross floor area or less for VMT analysis exemption.

The City of San Jose VMT Evaluation Tool was used to estimate VMT impacts for the project. The VMT Evaluation Tool calculates the per-capita and per-employee VMT for the half-mile radius surrounding the project site, as calculated using the City's travel demand model and adjusted to the parcel level. For projects that would trigger a VMT impact, VMT reduction strategies such as introducing TDM or additional multimodal infrastructure can be used to mitigate the VMT impact which is estimated from research literature and case studies.

The proposed project was evaluated in the VMT tool assuming development of 134,605 square-feet of industrial use. This land use total includes a portion of the site dedicated to office square-foot space which is typical of a warehouse land use. The proposed project designates approximately 5,000 square-feet or 3.8% of the total square footage as office land use, and this office allocation is consistent with other recent warehouse developments in the City of San Jose. An office-to-office warehouse square footage comparison summary of recent developments is presented in the **Appendices**.

Therefore, although 5,000 square feet of the total development is office use, the whole project is analyzed as an industrial land use for VMT impact. **Table 3** summarizes the VMT analysis.

Table 3: Project VMT Analysis

Scenario	Industrial VMT per Employee	Exceeds City Threshold and VMT Impact?
City VMT Threshold	14.37	N/A
Existing Conditions	14.67	Yes
Project Conditions	14.62	Yes
Project with VMT Reduction Strategies	14.31	No

The City's VMT per employee threshold for industrial land uses is 14.37. For the surrounding land use area, the existing VMT is 14.67. The proposed project (APN 678-93-039) is anticipated to generate a VMT per employee of 14.62 (excluding any VMT reduction strategies). The evaluation tool estimates that the project would exceed the City's industrial VMT per employee threshold and would trigger a VMT impact. The project will need to implement VMT reduction strategies to mitigate the VMT impact.

A summary of the project VMT outputs/results using the City's Evaluation Tool is presented in **Figure 4** and the **Appendices**.

3.2 VMT Reduction and Mitigation Measures

Projects must propose measures to reduce project VMT or mitigate a CEQA transportation impact if identified. Projects may select a combination of measures from the four VMT reduction strategies described in Section 3.6 of the Transportation Analysis Handbook which include project characteristics, multimodal improvements, parking, and transportation demand management (TDM) programs.

Since the project VMT exceeds the industrial thresholds of significance, the project will need to mitigate its CEQA transportation impact by implementing a variety of VMT reduction strategies. As addressed in the Transportation Analysis Handbook, the project should consider the following site design measures to mitigate its VMT impact:

- Incorporate physical improvements, such as sidewalk improvements, landscaping and bicycle parking that act as incentives for pedestrian and bicycle modes of travel.
- Provide secure and conveniently located bicycle parking and storage for employees and visitors;
- Provide bicycle and pedestrian connections from the site to the regional bikeway/pedestrian trail system.
- Place assigned carpool and van pool parking spaces at the most desirable on-site locations;
- Provide showers and lockers for employees walking or bicycling to work.
- Incorporate commercial services onsite or in close proximity
- Provide an on-site TDM coordinator;
- Provide transit information kiosks;
- Make transportation available during the day and guaranteed ride home programs for emergency use by employees who commute on alternate transportation. (This service may be provided by access to company vehicles for private errands during the workday and/or combined with contractual or pre-paid use of taxicabs, shuttles, or other privately provided transportation.);
- Provide vans for van pools;
- Implementation of a carpool/vanpool program (e.g., carpool ride matching for employees, assistance with vanpool formation, provision of vanpool vehicles, and car sharing);
- Provide shuttle access to regional rail stations (e.g. Caltrain, ACE, BART);
- Provide or contract for on-site or nearby child care services;
- Offer transit use incentive programs to employees, such as on site distribution of passes and/or subsidized transit passes for a local transit system (e.g. providing VTA Eco Pass system or equivalent broad spectrum transit passes to all on-site employees);
- Implementation of parking cash out program for employees (non-driving employees receive transportation allowance equivalent to the value of subsidized parking);
- Encourage use of telecommuting and flexible work schedules;
- Require that deliveries on-site take place during non-peak travel periods.

The project applicant would be responsible for ensuring that the VMT reduction strategies are implemented. After the development is constructed and the site is occupied, the property manager for the project would assume responsibility for implementing any ongoing VMT reduction strategies.

Based on direction from the City, implementation of several Tier 2 multi-modal infrastructure improvements can reduce the project per employee industrial VMT to 14.31 which is below the 14.37 industrial VMT threshold. Although implementation of every available City VMT reduction strategy may

not be feasible, it should be noted that a combination of identified subset VMT reduction strategies can help the project meet the City VMT threshold.

The following describes the applicable VMT reduction strategies that the project applicant will incorporate to reduce the project's VMT and satisfy the City's VMT per employee threshold. The proposed VMT measures and results are based on inputs from the City of San Jose VMT Evaluation Tool. Final implementation of the listed VMT reduction strategies would need to be coordinated between the project applicant and the City.

3.3 Tier 2 Multi-Modal Infrastructure

Per City request to improve multi-modal access, the project would need to coordinate with the City and implement the following improvements for VMT mitigation:

Construct raised crosswalks at the intersection corners of Silver Creek Valley Road / Piercy Road. Potential civil improvements such as drainage, signal, and utility modifications would be needed to implement the raised crosswalk for VMT mitigation.

This improvement would satisfy the following VMT reduction strategies:

- Pedestrian Network Improvement – This improvement would increase pedestrian access beyond the project development frontage.

Install Class IV protected bike lanes along the project frontage as well as Piercy Road from Hellyer Avenue to Silver Creek Valley Road per City of San Jose Better Bike Plan 2025. The project will be required to provide a monetary in-lieu fee contribution of $141 per linear foot (LF) for the Class IV protected bike lane along the Hellyer Avenue project frontage.

This multimodal improvement would satisfy the following VMT reduction strategies:

- Bike Access Improvement – This improvement would improve access to the Coyote Creek Trail and City bicycle network and would reduce the project's distance to the nearest existing bicycle facility from approximately 2,000 feet to 100 feet.

A summary of the project VMT outputs with the identified VMT reduction strategies from the City's Evaluation Tool is presented in **Figure 5** and the **Appendices**. These multimodal improvements would need to be coordinated between the project applicant and the City for approval and are discussed in Section 5.6.

3.4 Cumulative Impact Analysis

Projects must also demonstrate consistency with the Envision San Jose 2040 General Plan to address cumulative impacts. If a project is determined to be consistent with the General Plan, the project will be considered part of the cumulative solution to meet the General Plan's long-range goals and it will result in a less-than-significant cumulative impact. Factors that contribute to a determination of consistency with the General Plan include a project's density, design, and conformance to the goals and policies set forth in the General Plan.

Based on the project description and intended use, the proposed development is consistent with the goals of the General Plan and is anticipated to result in a less-than-significant cumulative impact.

Figure 4: San Jose VMT Evaluation Tool Report (Project Conditions)

CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

PROJECT:

Name: 469 Piercy Road — Tool Version: 2/29/2019
Location: 469 Piercy Road — Date: 3/22/2023
Parcel: 67893039 Parcel Type: Suburb with Single-Family Homes
Proposed Parking Spaces Vehicles: 86 Bicycles: 10

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:	134.6 KSF		

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density	
Existing Density (DU/Residential Acres in half-mile buffer)	2
With Project Density (DU/Residential Acres in half-mile buffer)	2
Increase Development Diversity	
Existing Activity Mix Index	0.76
With Project Activity Mix Index	0.76
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)	21
With Project Density (Jobs/Commercial Acres in half-mile buffer)	24

Tier 2 - Multimodal Infrastructure

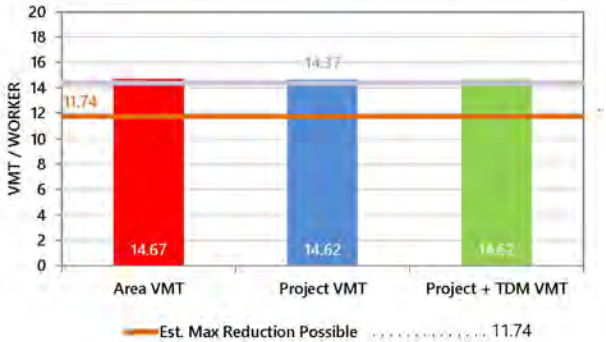
Tier 3 - Parking

Tier 4 - TDM Programs

CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

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.



Est. Max Reduction Possible 11.74

Industrial Threshold 14.37

Figure 5: San Jose VMT Evaluation Tool Report (Project with VMT Reduction Strategies)

CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

PROJECT:

Name: 469 Piercy Road - Mitigated
Location: 469 Piercy Road
Parcel: 67893039 Parcel Type: Suburb with Single-Family Homes
Tool Version: 2/29/2019
Date: 3/22/2023
Proposed Parking Spaces Vehicles: 86 Bicycles: 10

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:	134.6 KSF		

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density	
Existing Density (DU/Residential Acres in half-mile buffer)	2
With Project Density (DU/Residential Acres in half-mile buffer)	2
Increase Development Diversity	
Existing Activity Mix Index	0.76
With Project Activity Mix Index	0.76
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)	21
With Project Density (Jobs/Commercial Acres in half-mile buffer)	24

Tier 2 - Multimodal Infrastructure

Bike Access Improvements *(In Coordination with SJ)*	
Distance to Nearest Existing Bicycle Facility	2000 feet
Distance to Nearest Bicycle Facility With Project	100 feet
Pedestrian Network Improvements *(In Coordination with SJ)*	
Are pedestrian improvements provided beyond the development frontage?	Yes

Tier 3 - Parking

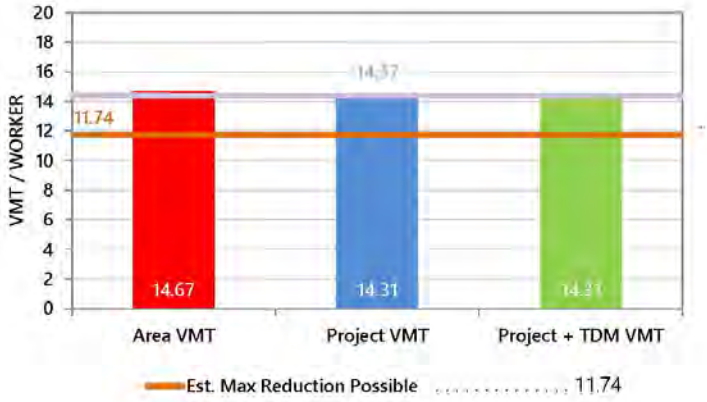
Tier 4 - TDM Programs

Page 1 of 2

CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

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.



4 LTA PROJECT DESCRIPTION

This chapter describes the local transportation analysis including the method by which project traffic is estimated through trip generation, trip distribution, and volume assignment.

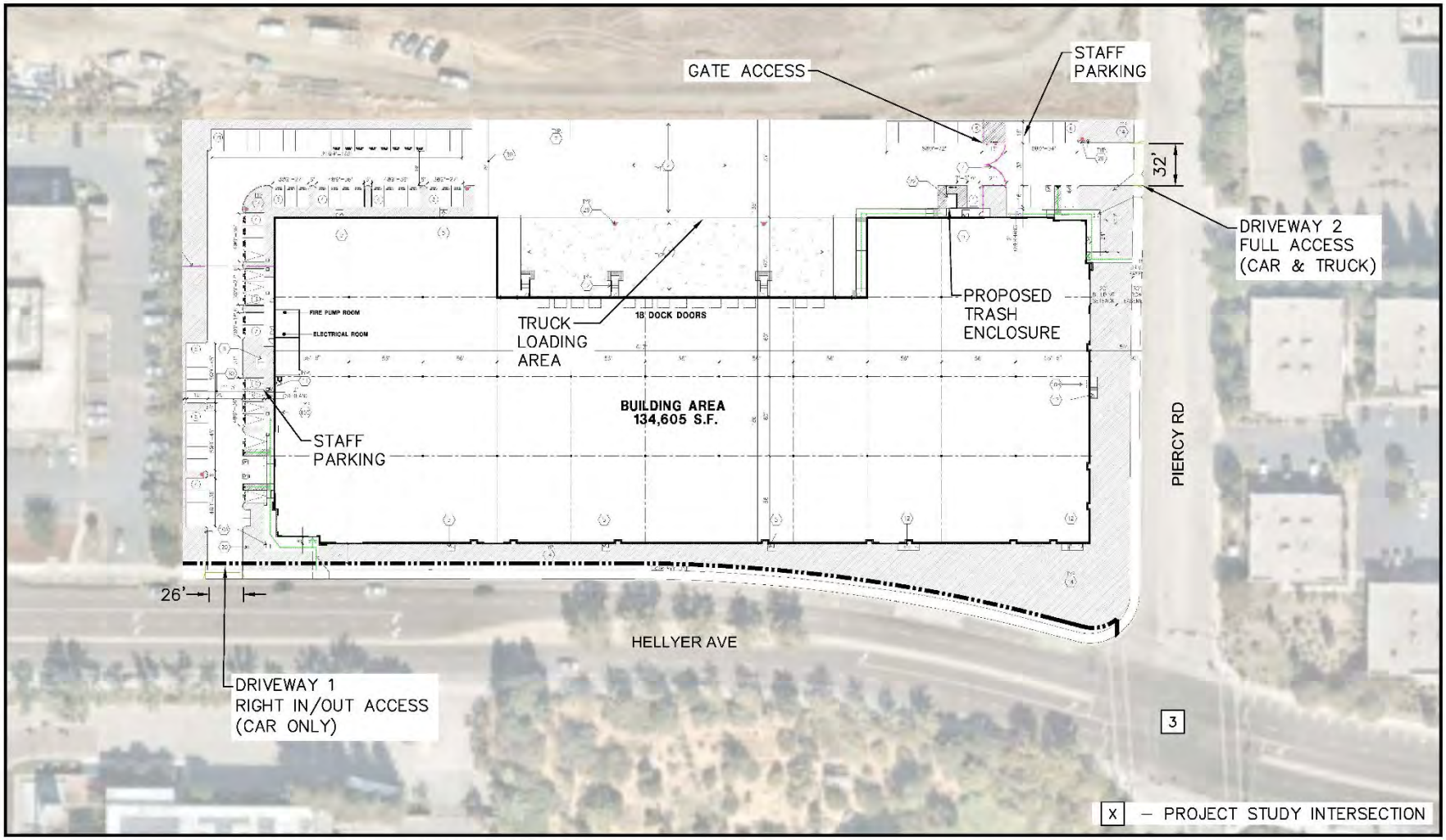
4.1 Project Site Plan

Based on the most recent site plan provided by the project applicant, the project site is in the area bounded by Hellyer Avenue and Piercy Road. The Project's site plan proposes to construct a warehouse totaling up to 134,605 total square-feet of building area on the 5.93 gross acre site. The project would redevelop the existing site which is currently vacant.

The proposed site would provide up to 86 car parking spaces, 10 bicycle parking spaces, and 15 truck loading docks on-site. The site will be accessed from one (1) driveway along Hellyer Avenue and one (1) driveway along Piercy Road.

The project site plan is presented in **Figure 6** and the **Appendices**.

Figure 6: Project Site Plan



4.2 Project Trip Generation

Project Site Vehicle Operations

Trip generation for the proposed project land uses was calculated using average trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* (September 2021).

A trip is defined as a single or one-directional vehicle movement in either the origin or destination at the project site. In other words, a trip can be either "to" or "from" the site. In addition, a single customer visit to a site is counted as two trips (i.e. one to and one from the site). Daily, AM, and PM peak hour trips for the project were calculated with average trip rates.

The project description and future tenant for the industrial use is under negotiation at this time; however, the speculative project building is a warehouse for storage. Due to the project description and the unknown future tenants for the industrial use, the ITE 150 Warehousing land use was conservatively applied to the proposed development.

Baseline Vehicle Trips

Baseline vehicle trips for the proposed project (excluding trip adjustments) are anticipated to generate a gross total of 230 daily trips, 26 AM peak hour trips, and 24 PM peak hour vehicle trips. Of the AM peak hour trips, approximately 20 trips will be inbound to the project and 6 trips will be outbound from the project. For the PM peak hour trips, approximately 7 trips are inbound while 17 trips are outbound.

Vehicle Trip Reductions

Per the per the 2020 *Transportation Analysis Handbook*, an internal capture reduction can be applied based on vehicle-trip reduction rates from the *VTA Transportation Impact Analysis Guidelines*. An internal capture reduction was not applied to the project, since it does not contain an applicable mixed land use.

A location-based mode share trip reduction was applied. This adjustment is a function of multimodal connectivity and accounts for greater mode share for projects located in urban or transit developed areas. From Table 5 and Table 6 of the *Transportation Analysis Handbook*, the project location is designated as a "Suburb with single-family housing" area with a vehicle mode share of 95 percent for industrial land uses. Therefore, a 5% mode share trip reduction was assumed to the project.

Per the *Transportation Analysis Handbook*, identified VMT reduction strategies will also encourage reductions in vehicle-trips generated by the project. For commercial and industrial projects, it is assumed that every percent reduction in per-employee VMT is equivalent to one percent reduction in peak hour vehicle trips. From the City's VMT Evaluation Tool, the existing VMT is 14.62 and the project with VMT reduction strategies identified in Section 3 would generate a VMT of 14.31. Therefore, a VMT vehicle-trip reduction of 2.12% was applied to the project.

Total gross vehicle trips for the proposed project (including trip adjustments) are to be 213 daily trips, 23 AM peak hour trips, and 21 PM peak hour vehicle trips. Of the AM peak hour trips, approximately 18 trips will be inbound to the project and 5 trips will be outbound from the project. For the PM peak hour trips, approximately 5 trips will be inbound, while 16 trips are outbound.

Existing Use and Pass-By Trip Credits

An existing two-story and a single story wood building is present on-site; however, to provide a conservative analysis, the existing site was assumed as a vacant parcel. The proposed project land uses are not anticipated to generate pass-by or diverted trips from the roadway network. Therefore, an existing use or pass-by trip credit was not applied to the project.

Net Vehicle Project Trips

Development of the proposed project with all applicable trip reductions and credits is anticipated to generate a net total of 213 additional daily trips, 23 AM, and 21 PM peak hour trips to the roadway network. **Table 4** provides a summary of the proposed trip generation and trip reductions/credits.

Table 4: Project Trip Generation

LAND USE / DESCRIPTION	PROJECT SIZE	TOTAL DAILY TRIPS	AM PEAK TRIPS			PM PEAK TRIPS		
			TOTAL	IN	OUT	TOTAL	IN	OUT
Trip Generation Rates (ITE)								
Warehousing [ITE 150]	Per 1,000 Sq Ft	1.71	0.19	77%	23%	0.18	28%	72%
1. Baseline Vehicle-Trips								
469 Piercy Road	134.605 1,000 Sq Ft	230	26	20	6	24	7	17
Baseline Project Vehicle-Trips		**230**	**26**	**20**	**6**	**24**	**7**	**17**
2. Internal Trip Adjustments								
Mixed-Use Reduction (VTA Internal Capture)	0% N/A	0	0	0	0	0	0	0
Project Vehicle-Trips After Reduction		**230**	**26**	**20**	**6**	**24**	**7**	**17**
3. Location-based Mode Share Adjustments								
Suburb w/ SFH Reduction (Mode Share)	-5%	(12)	(2)	(1)	(1)	(2)	(1)	(1)
Project Vehicle-Trips After Reduction		**218**	**24**	**19**	**5**	**22**	**6**	**16**
4. Project Trip Adjustments								
VMT Vehicle-Trip Reduction (Model Sketch Tool)	-2.12%	(5)	(1)	(1)	0	(1)	(1)	0
Project Vehicle-Trips After Reduction		**213**	**23**	**18**	**5**	**21**	**5**	**16**
5. Other Trip Adjustments								
Pass-by and Diverted Link Trips	0% N/A	0	0	0	0	0	0	0
Existing Uses	0% N/A	0	0	0	0	0	0	0
Net Project Vehicle-Trips		**213**	**23**	**18**	**5**	**21**	**5**	**16**

Notes:

Project Land Uses assumed based on proposed site plan from HPA Architecture

Daily, AM, and PM trips based on average land use rates from the Institute of Traffic Engineers Trip Generation 11th Edition

A 5% Mode Share Reduction from San Jose Transportation Analysis Handbook 2020 was applied since the project is located in an "Suburban with Single Family Home" area.

A 2.12% VMT Reduction from San Jose Transportation Analysis Handbook 2020 was applied since the project is planning to implement Tier 2 Multimodal VMT reduction strategies. Reduction percentage obtained from City VMT Evaluation Tool.

4.3 Project Trip Distribution and Assignment

Due to the nature of the proposed development, vehicle project trips are anticipated to access the US 101 regional freeway. Trip distribution and assignment assumptions for the project were based on the project driveway location, the freeway ramp location, community characteristics, and professional engineering judgement. The project trips to and from the site are anticipated to access the following regional facilities and destinations with the estimated trip distribution percentages as shown in **Table 5**.

Table 5: Project Trip Distribution

Location	Roadway Origin / Destination	Inbound Trip Distribution (%)	Outbound Trip Distribution (%)
A	Hellyer North	5%	5%
B	Hellyer South	5%	5%
C	Monterey North	5%	5%
D	Monterey South	5%	5%
E	Blossom Hill West	5%	5%
F	Silver Creek Valley East	5%	5%
G	US 101 North	35%	35%
H	US 101 South	35%	35%

The net project trip assignments and distributions are presented in **Figure 7** and **Figure 8**. The trip assignment shown represents the shortest paths to and from the project site under ideal traffic conditions.

Figure 7: Net Project Trip Distribution

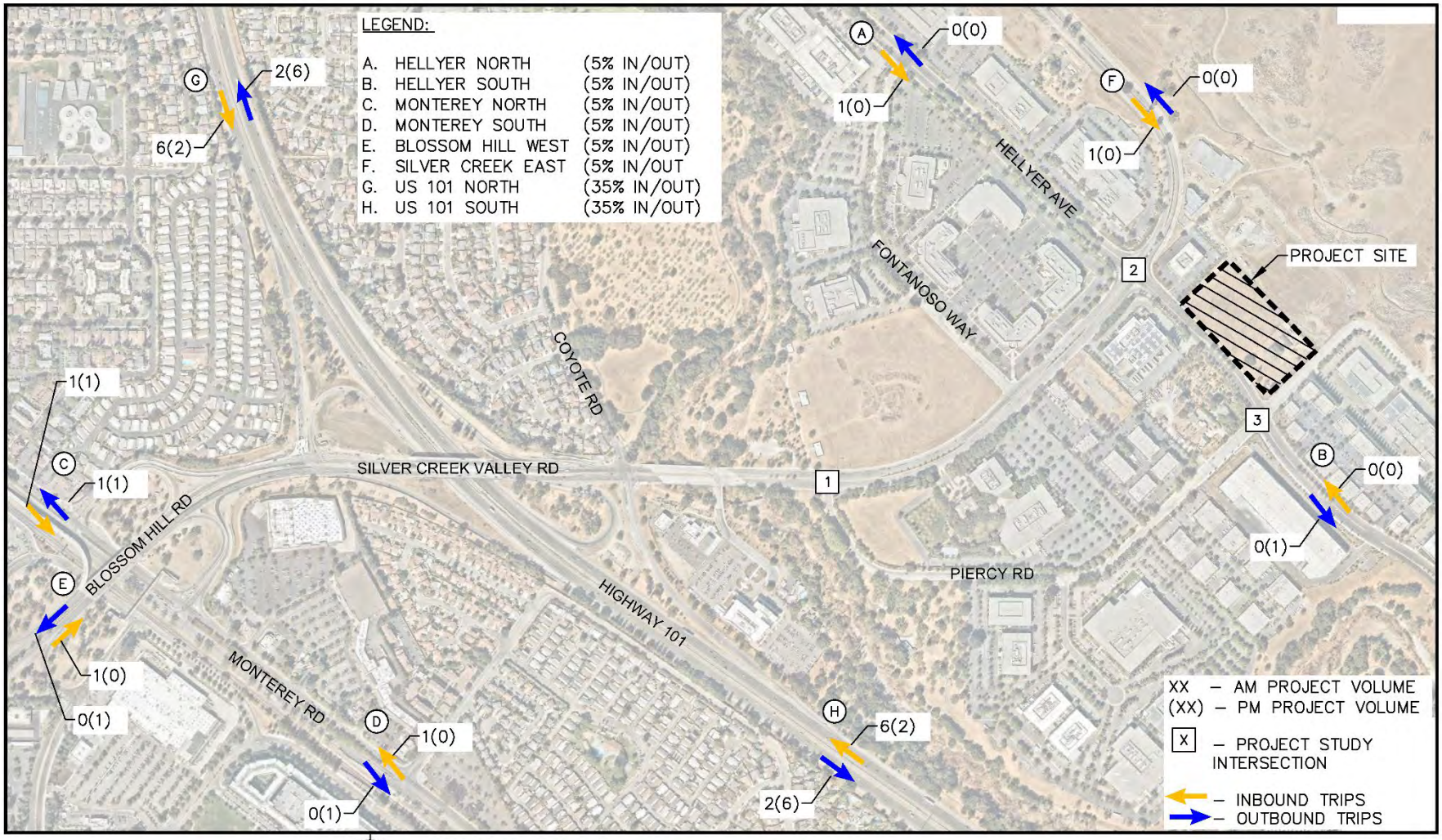
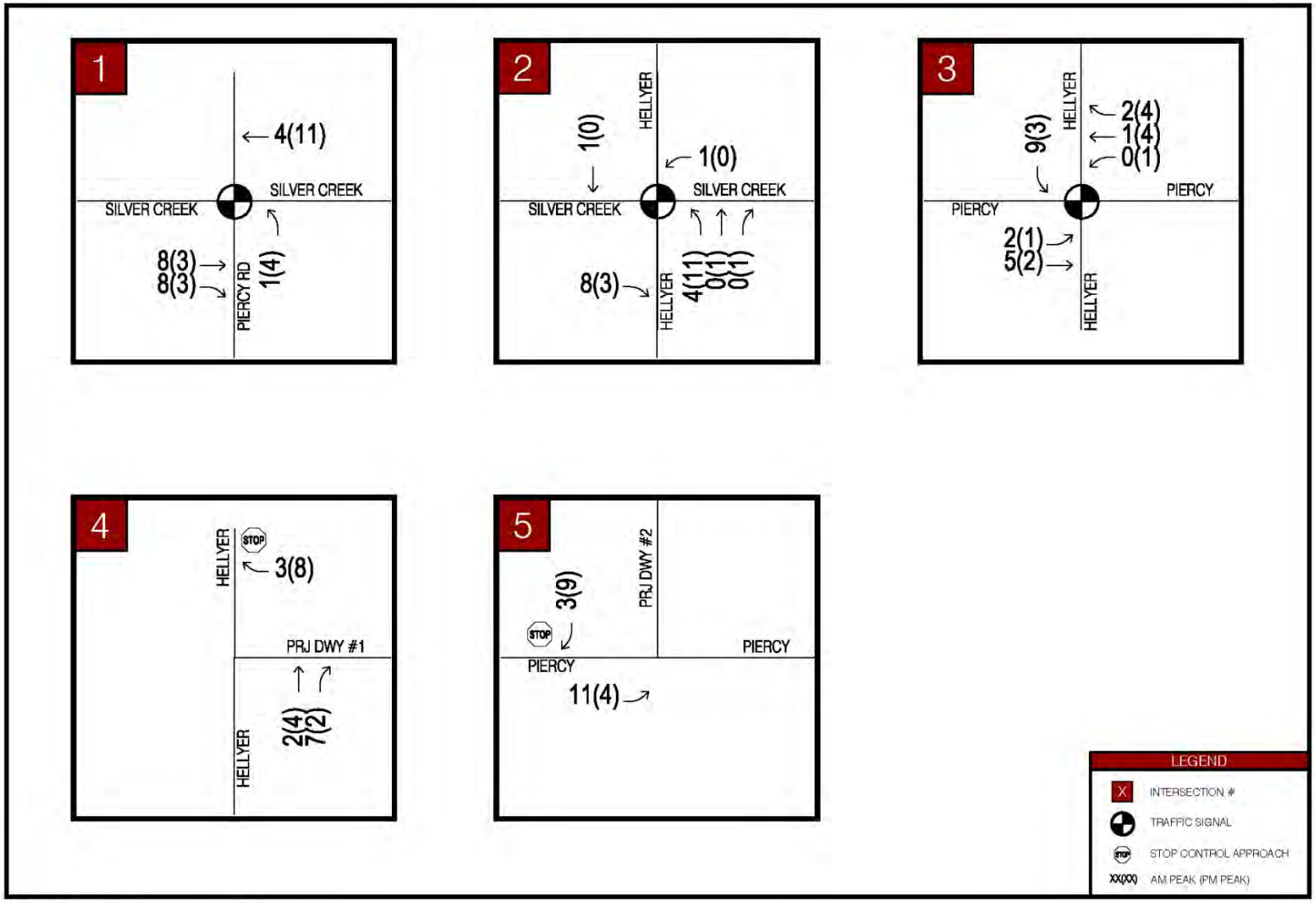


Figure 8: Net Project Trip Assignment



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NET PROJECT PEAK HOUR TRIP ASSIGNMENT

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469 PIERCY TRANSPORTATION ANALYSIS

5 LTA INTERSECTION OPERATIONS

This chapter describes the local transportation analysis including intersection operations analysis for: existing, background, and cumulative conditions; intersection vehicle queuing analysis; and mitigation measures for any adverse effects to intersection level of service caused by the project.

It should be noted that the project is located in the Edenvale Area Development Policy (EADP) boundary. A prior traffic study (iStar Mixed-Use Development) was completed for the EADP and identified intersection improvements that have already been completed. Based on City direction and the 2014 EADP Update, the project is not required to study any signalized intersections and their adverse effects under project conditions. For informational purposes, intersection level of service operations analysis is shown for Existing, Background, and Cumulative Conditions.

5.1 Existing Conditions Analysis:

Due to COVID-19 situation, traffic counts for Year 2022 were determined from historic count data. Weekday AM and PM peak hour intersection turning movement volumes for the existing study intersections were obtained from City of San Jose traffic database (Pre-COVID conditions) and applying a 1% compound growth rate. These historic counts included vehicles, bicycles, and pedestrians and were collected when local schools were in session and the weather was fair. Peak hour volumes during each intersection's respective peak were conservatively used in this analysis, therefore, some volume imbalances were observed between study intersections. Where imbalances occurred, volumes were conservatively increased slightly above what was counted in the field. Existing intersection lane geometry and peak hour turning movement volumes are shown in **Figure 9** and **Figure 10**, respectively.

Year 2022 traffic count data was also collected on Wednesday 1/19/2022 and Tuesday 3/1/2022 for the study intersections, but these counts yielded fewer traffic volumes than the Pre-COVID counts. Per City direction, the Pre-COVID counts applied with a growth factor was used to provide a conservative analysis.

Traffic operations were evaluated at the study intersections under Existing conditions, and the results of the analysis are presented in **Table 6**. New intersection turning-movement counts and TRAFFIX output sheets are provided in the **Appendices**.

Table 6: Intersection Operations Summary for Existing Conditions

#	Intersection	LOS Criteria	Control	Existing Conditions							
				AM Peak				PM Peak			
				LOS	Delay (sec)[1]	v/c Ratio	Crit. Delay (sec)	LOS	Delay (sec)[1]	v/c Ratio	Crit. Delay (sec)
1	Silver Creek Valley Rd / Piercy Rd	D	Signal	A	7.5	0.209	5.7	C	22.2	0.310	20.5
2	Silver Creek Valley Rd / Hellyer Ave	D	Signal	C	25.4	0.303	29.9	C	28.8	0.407	28.7
3	Heller Ave / Piercy Rd	D	Signal	B	16.4	0.194	12.5	C	23.0	0.184	22.6

The study intersections are anticipated to operate at acceptable LOS during the AM and PM peak hour for the Existing scenario.

Figure 9: Existing Intersection Lane Geometry

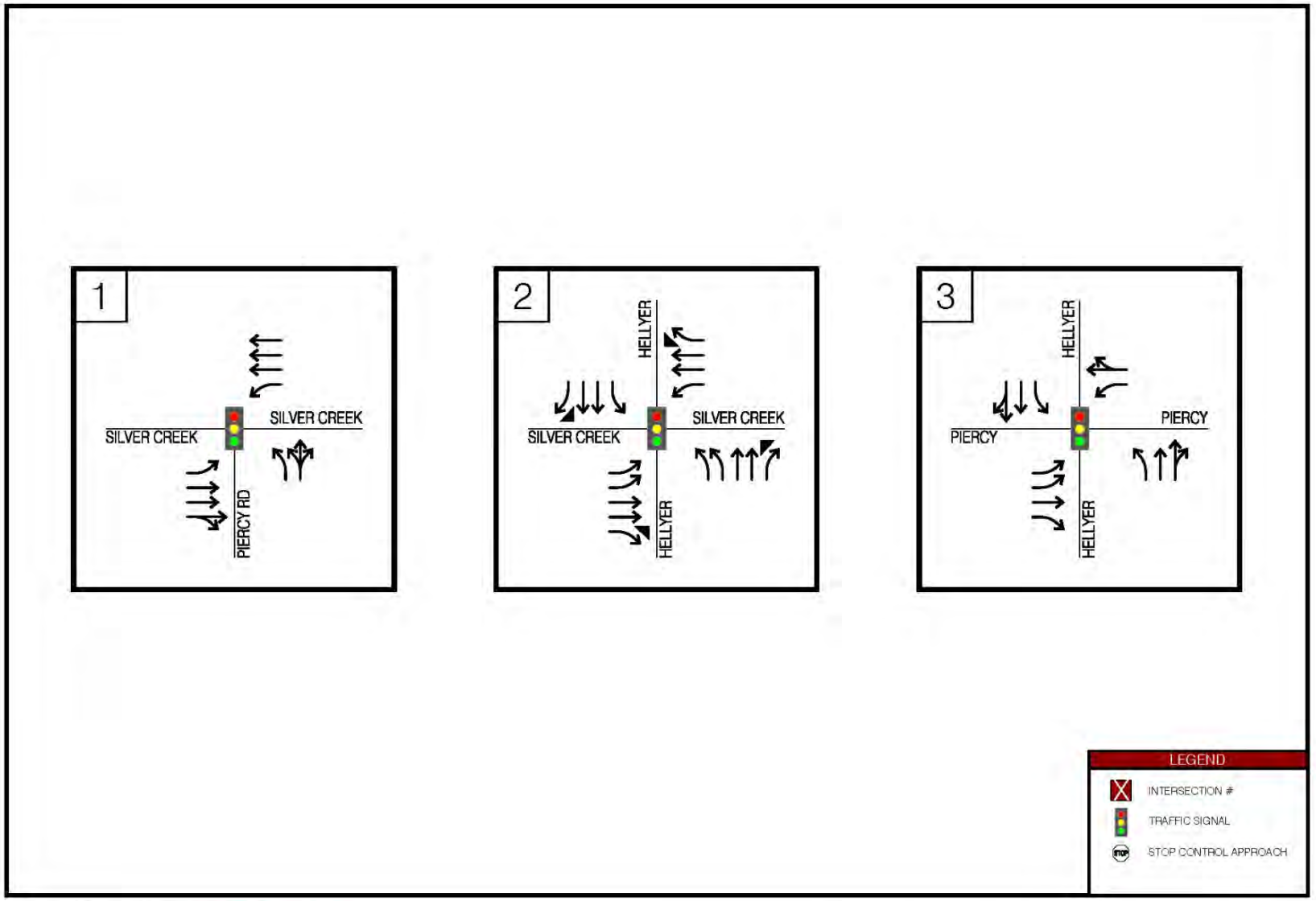
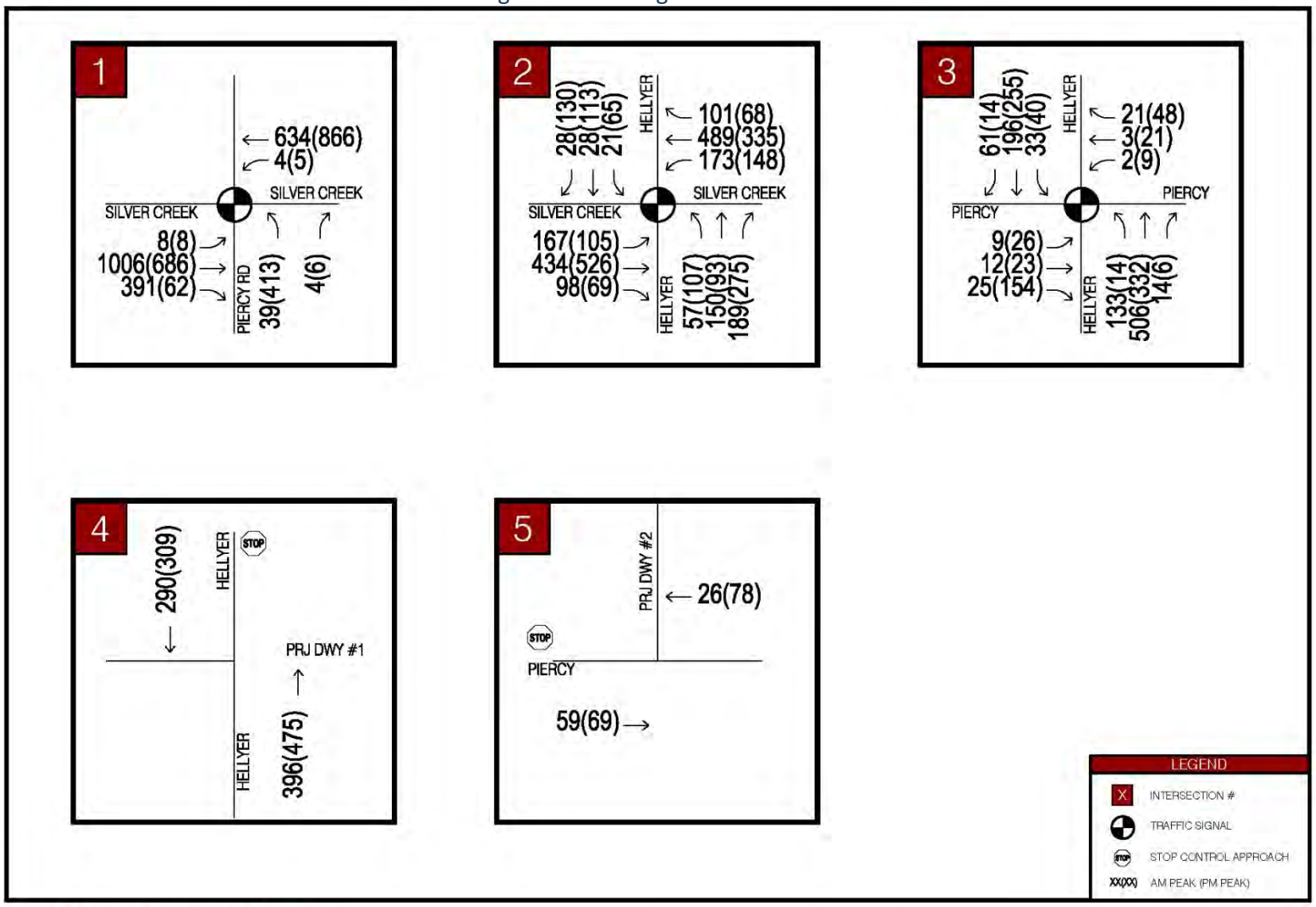


Figure 10: Existing Traffic Volumes



EXISTING CONDITION PEAK HOUR VOLUMES

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469 PIERCY TRANSPORTATION ANALYSIS

5.2 Background Conditions Analysis

Traffic generated from other approved projects in the project study area were obtained from the City of San Jose Approved Trip Inventory (ATI) database attached in the **Appendices**. These ATI traffic volumes were added to the existing traffic counts to generate the Background baseline scenario and include the following local projects.

- North Coyote Valley Office/Industrial
- North Coyote Valley Campus Industrial
- Edenvale Zone 1 Office/Industrial
- Edenvale Zone 2 Office Industrial
- Edenvale Zone 3 and 4 Office/Industrial
- Edenvale Zone 3 and 4 Pool Office/Industrial
- EEHDP Evergreen Residential
- EEHDP Evergreen Retail/Commercial
- (3-14641) Hitachi Office/Industrial Credit
- PDC04-100 R&D (3-14681) IStar R&D
- PDC12-028 Res (3-14681) IStar Mixed-Use
- PDC99-053 (3-13970) Cisco North Coyote Valley

The roadway network under Background conditions would be the same as the existing roadway network with the addition of the following planned intersection improvements by Caltrans and the City.

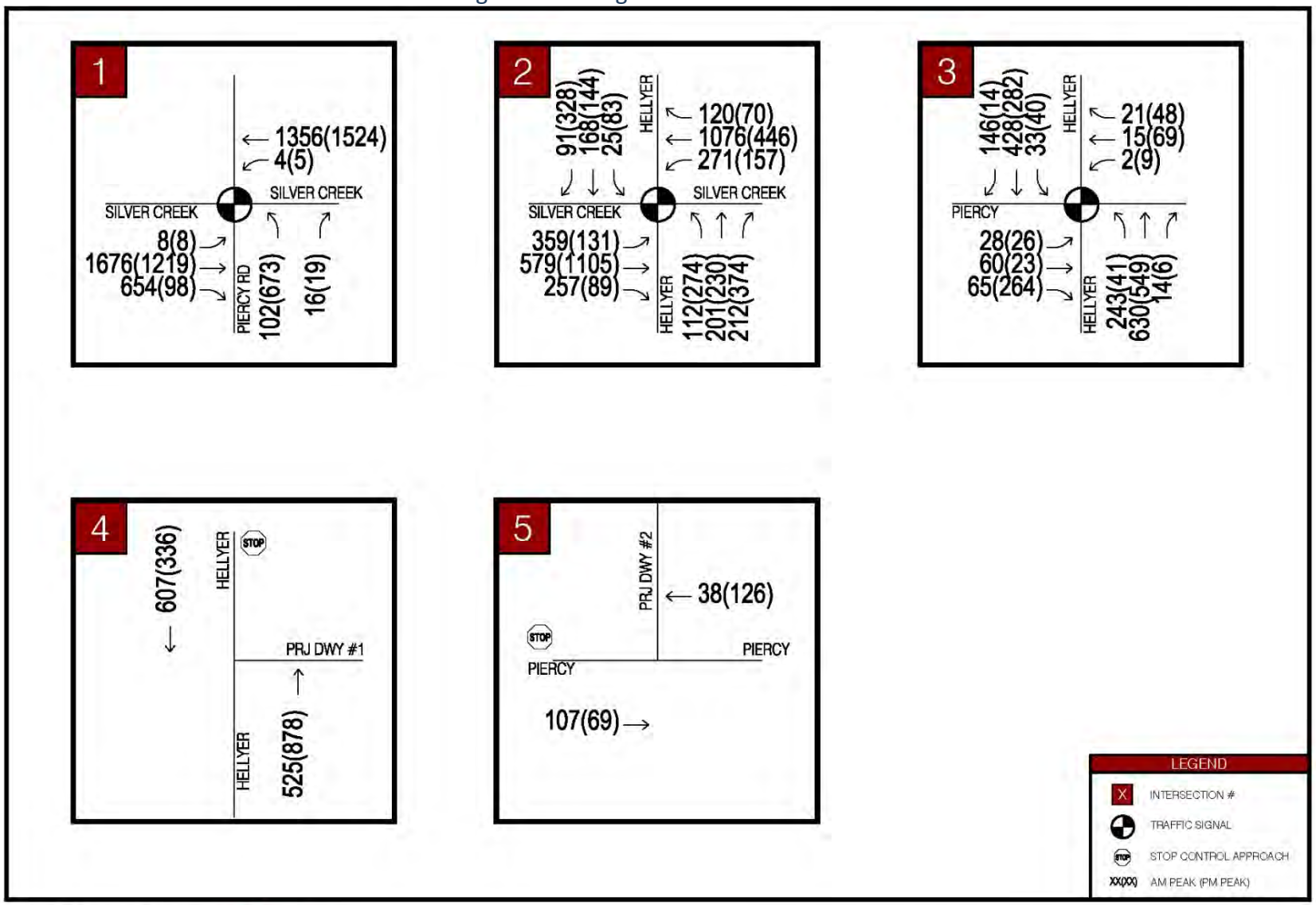
- **Blossom Hill Road / Highway 101 Ramp Interchange**
  - The approved US-101 Blossom Hill Road Interchange project is currently under construction and consists of widening the overcrossing to 7 vehicle travel lanes and adding a Class I separated bikeway through the interchange on the northside.
  - The SB Ramp intersection would be improved to add one (1) southbound right turn lane, one (1) eastbound through lane, and one (1) westbound through lane.
  - The NB Ramp / Coyote intersection would be improved to add one (1) northbound left turn lane, one (1) eastbound left turn lane, and one (1) westbound through lane.
  - Bike and pedestrian access would be improved with green bike striping and continental crossings on the north and east legs.

Background peak hour turning movement volumes are shown in **Figure 11**. Traffic operations for the study intersections under Background conditions are shown below in **Table 7.** The study intersections are anticipated to operate at acceptable LOS during the AM and PM peak hour for the Background scenario.

Table 7: Intersection Operations Summary for Background Conditions

#	Intersection	LOS Criteria	Control	Background Conditons							
				AM Peak				PM Peak			
				LOS	Delay (sec)[1]	v/c Ratio	Crit. Delay (sec)	LOS	Delay (sec)[1]	v/c Ratio	Crit. Delay (sec)
1	Silver Creek Valley Rd / Piercy Rd	D	Signal	A	7.1	0.481	9.6	C	22.9	0.529	23.1
2	Silver Creek Valley Rd / Hellyer Ave	D	Signal	C	27.6	0.544	28.0	C	33.5	0.734	35.4
3	Heller Ave / Piercy Rd	D	Signal	C	22.3	0.328	27.3	C	23.6	0.369	20.0

Figure 11: Background Traffic Volumes



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BACKGROUND CONDITION PEAK HOUR VOLUMES

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469 PIERCY TRANSPORTATION ANALYSIS

5.3 Background Plus Project Conditions Analysis

Traffic operations were evaluated at the study intersections and new project driveways under Background Plus Project conditions based on Background conditions and adding the net vehicle trips from the proposed project to the Background roadway geometry and traffic control. The net project traffic volumes were incorporated from the Trip Generation and Trip Distribution described in Section 4 of this report. Traffic operations for the study intersections and the project driveways under Project conditions are shown below in **Table 8** and **Figure 12**.

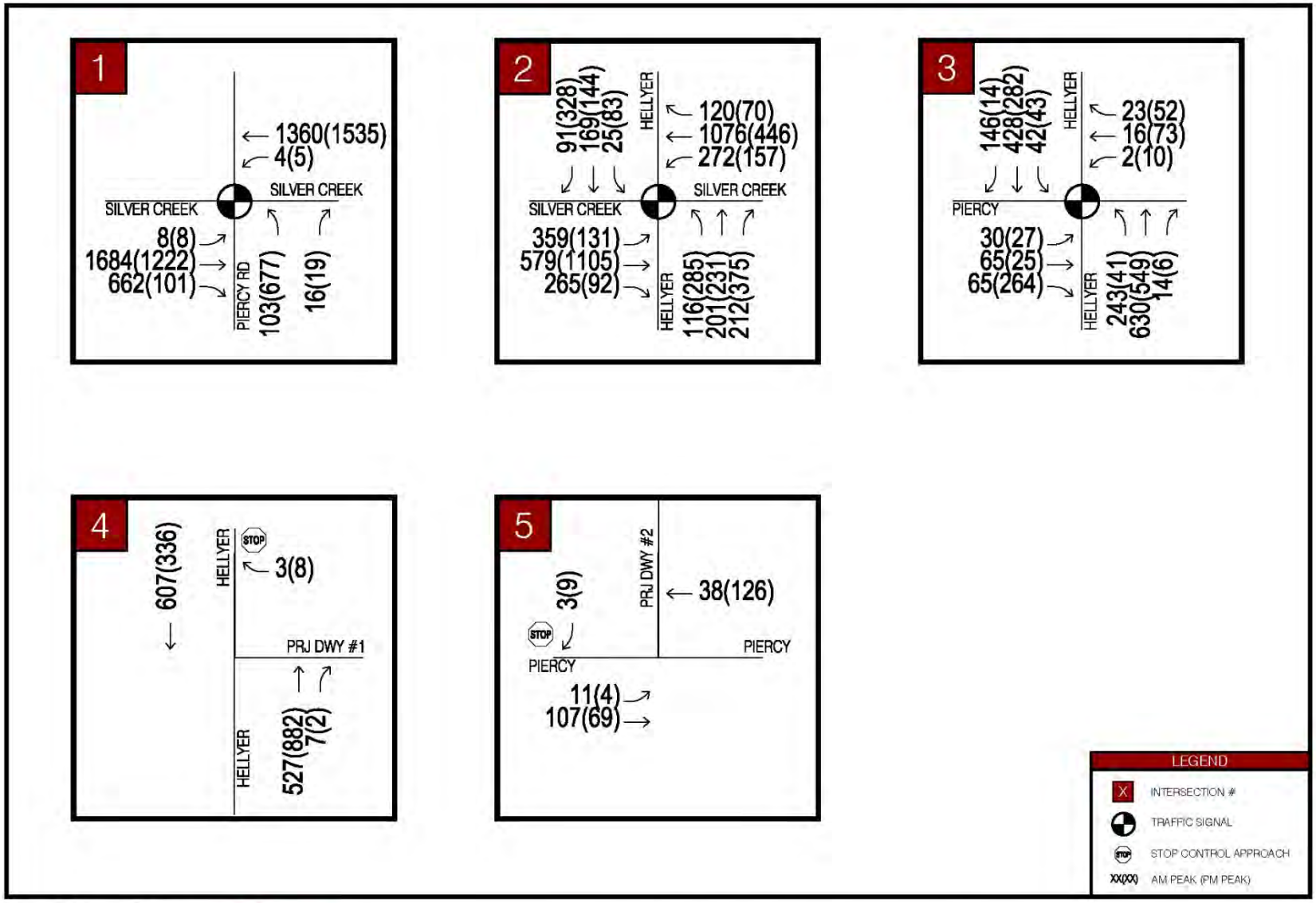
Table 8: Intersection Operations Summary for Background Plus Project Conditions

#	Intersection	LOS Criteria	Background Plus Project Conditions							
			AM Peak							
			LOS	Delay (sec)[1]	Delay Var	v/c Ratio	v/c Var	Crit. Delay (sec)	Crit. Delay Var	Impact
1	Silver Creek Valley Rd / Piercy Rd	D	A	7.1	0.0	0.487	0.006	9.6	0.0	NO
2	Silver Creek Valley Rd / Hellyer Ave	D	C	27.6	0.0	0.546	0.002	28.2	0.2	NO
3	Heller Ave / Piercy Rd	D	C	22.5	0.2	0.331	0.003	27.4	0.1	NO
4	Hellyer Ave / Project Dwy #1	D	A	9.7	9.7	0.004	0.004	0.0	0.0	NO
5	Piercy Rd / Project Dwy #2	D	A	8.5	8.5	0.007	0.007	0.7	0.7	NO

#	Intersection	LOS Criteria	Background Plus Project Conditions							
			PM Peak							
			LOS	Delay (sec)[1]	Delay Var	v/c Ratio	v/c Var	Crit. Delay (sec)	Crit. Delay Var	Impact
1	Silver Creek Valley Rd / Piercy Rd	D	C	22.9	0.0	0.533	0.004	23.2	0.1	NO
2	Silver Creek Valley Rd / Hellyer Ave	D	C	33.6	0.1	0.738	0.004	35.7	0.3	NO
3	Heller Ave / Piercy Rd	D	C	23.9	0.3	0.372	0.003	20.3	0.3	NO
4	Hellyer Ave / Project Dwy #1	D	B	10.9	10.9	0.013	0.013	0.1	0.1	NO
5	Piercy Rd / Project Dwy #2	D	A	8.9	8.9	0.010	0.010	0.5	0.5	NO

The study intersections and project driveways are anticipated to operate at acceptable LOS during the AM and PM peak hour, and the project is not anticipated to create a significant traffic adverse effect under Background Plus Project conditions.

Figure 12: Background Plus Project Traffic Volumes



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BACKGROUND PLUS NET PROJECT CONDITION PEAK HOUR VOLUMES

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469 PIERCY TRANSPORTATION ANALYSIS

5.4 Cumulative Conditions Analysis

The Cumulative scenario was evaluated using peak-hour traffic volumes, intersection geometry, and traffic control from forecasted traffic growth from approved projects and other proposed but pending developments in the project study area (Background plus Project plus pending projects). Traffic operations for the study intersections under Cumulative conditions are shown below in **Table 9** and **Figure 13**.

From discussions with City staff, the Cumulative analysis includes the following addition of net pending project trips to the study intersections. Trip generation, distribution, and assignment for the pending projects to the roadway network were provided by the City in February 2022.

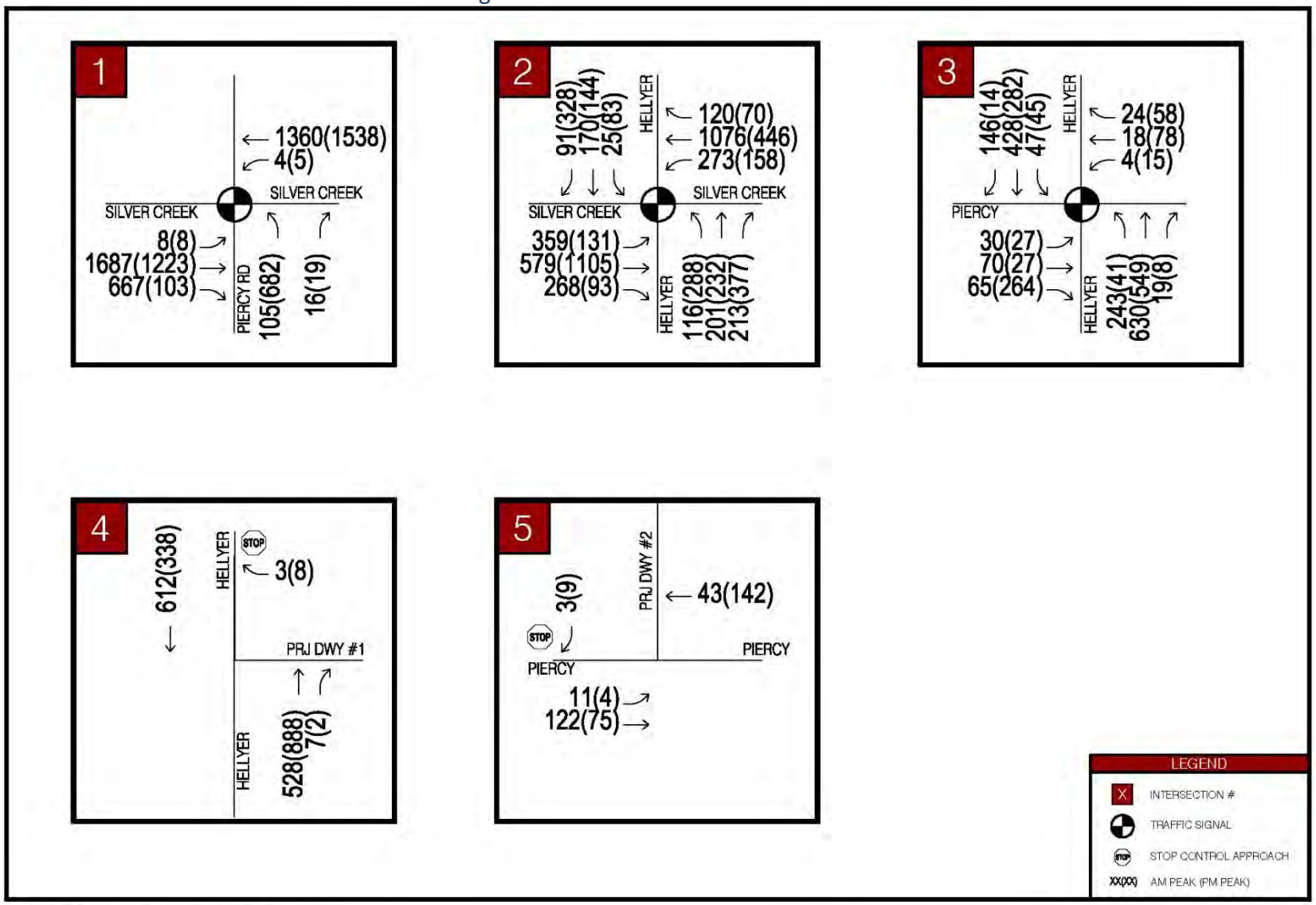
- **455 Piercy Road Warehouse (3-14392, H21-022) –** Industrial development with 121,600 square-feet of warehouse use. This pending development is located east of the project site in the northwest quadrant of the Piercy Road and Hellyer Avenue intersection which would redevelop an existing vacant parcel. Trip assignment for this pending development assumes driveway access from the existing Piercy Road and Hellyer Avenue roadways.

Table 9: Intersection Operations Summary for Cumulative Conditions

#	Intersection	LOS Criteria	Cumulative Conditions							
			AM Peak				PM Peak			
			LOS	Delay (sec)[1]	v/c Ratio	Crit. Delay (sec)	LOS	Delay (sec)[1]	v/c Ratio	Crit. Delay (sec)
1	Silver Creek Valley Rd / Piercy Rd	D	A	7.1	0.491	9.7	C	22.9	0.535	23.2
2	Silver Creek Valley Rd / Hellyer Ave	D	C	27.7	0.546	28.2	C	33.7	0.739	35.8
3	Heller Ave / Piercy Rd	D	C	22.7	0.333	27.5	C	24.1	0.377	20.6
4	Hellyer Ave / Project Dwy #1	D	A	9.7	0.004	0.0	B	10.9	0.013	0.1
5	Piercy Rd / Project Dwy #2	D	A	8.5	0.007	0.6	A	9.0	0.010	0.5

The study intersections are anticipated to operate at acceptable LOS during the AM and PM peak hour for the Cumulative scenario.

Figure 13: Cumulative Traffic Volumes



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CUMULATIVE CONDITION PEAK HOUR VOLUMES

DH-197532001 MARCH 2022

469 PIERCY TRANSPORTATION ANALYSIS

5.5 Intersection Queue Analysis

Select study intersections near the project site were evaluated for left-turn vehicle queuing capacity and storage analysis for each study scenario and summarized in **Table 10**. Under Existing, Background, and Cumulative Conditions, the following left turn lanes are anticipated to have insufficient vehicle storage to accommodate the vehicle queue:

- Silver Creek Valley Road / Hellyer Avenue Westbound Left Turn (AM and PM peak)

However, the addition of project vehicle trips is not anticipated to increase the vehicle queue and create an adverse effect to the study intersection.

Table 10: Left Turn Queue Analysis

DESCRIPTION	AM PEAK HOUR						PM PEAK HOUR					
	#1 SILVER CREEK / PIERCY	#2 SILVER CREEK / HELLYER		#3 HELLYER / PIERCY			#1 SILVER CREEK / PIERCY	#2 SILVER CREEK / HELLYER		#3 HELLYER / PIERCY		
	NBL	NBL	WBL	SBL	EBL	WBL	NBL	NBL	WBL	SBL	EBL	WBL
Existing Conditions												
95% Queue (car/ln)	2	2	9	3	0	0	10	4	10	3	1	1
95% Queue (ft/ln)	50	50	225	75	0	0	250	100	250	75	25	25
Number of Turn Lanes	2	2	1	1	2	1	2	2	1	1	2	1
Storage (ft/ln)	300	400	200	200	300	200	300	400	200	200	300	200
Total Storage (ft/ln)	600	800	200	200	600	200	600	800	200	200	600	200
Sufficient Storage?	YES	YES	NO	YES	YES	YES	YES	YES	NO	YES	YES	YES
Background Conditions												
95% Queue (car/ln)	5	5	14	2	1	0	19	11	14	4	1	1
95% Queue (ft/ln)	125	125	350	50	25	0	475	275	350	100	25	25
Number of Turn Lanes	2	2	1	1	2	1	2	2	1	1	2	1
Storage (ft/ln)	300	400	200	200	300	200	300	400	200	200	300	200
Total Storage (ft/ln)	600	800	200	200	600	200	600	800	200	200	600	200
Sufficient Storage?	YES	YES	NO	YES	YES	YES	YES	YES	NO	YES	YES	YES
Background Plus Project Conditions												
95% Queue (car/ln)	5	5	14	2	1	0	19	11	14	4	1	1
95% Queue (ft/ln)	125	125	350	50	25	0	475	275	350	100	25	25
Number of Turn Lanes	2	2	1	1	2	1	2	2	1	1	2	1
Storage (ft/ln)	300	400	200	200	300	200	300	400	200	200	300	200
Total Storage (ft/ln)	600	800	200	200	600	200	600	800	200	200	600	200
Sufficient Storage?	YES	YES	NO	YES	YES	YES	YES	YES	NO	YES	YES	YES
Project Impact?	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Cumulative Conditions												
95% Queue (car/ln)	5	5	14	3	1	0	19	11	14	4	1	1
95% Queue (ft/ln)	125	125	350	75	25	0	475	275	350	100	25	25
Number of Turn Lanes	2	2	1	1	2	1	2	2	1	1	2	1
Storage (ft/ln)	300	400	200	200	300	200	300	400	200	200	300	200
Total Storage (ft/ln)	600	800	200	200	600	200	600	800	200	200	600	200
Sufficient Storage?	YES	YES	NO	YES	YES	YES	YES	YES	NO	YES	YES	YES

The 95th percentile outbound queue at the project driveways are anticipated to be up to 50-feet (2 car length) for the Project scenario during the AM and PM peak. This maximum queue would extend into proposed drive aisle. Vehicles exiting the proposed driveway would be able to access Hellyer Avenue and Piercy Road when there are sufficient gaps generated between platooning vehicles.

From the trip distribution presented in Section 4, the total gross vehicles exiting the project site for the PM peak hour is 16 trips while the gross outbound trips at a single project driveway is up to 8 PM trips. This maximum outbound trip rate at the project driveway is equivalent to a rate of 1 vehicle every 7.5 minutes. The driveway vehicle queue is not expected to create an adverse effect to roadway on-site traffic operations.

5.6 Adverse Effects and Improvements

This section discusses significant transportation project adverse effects identified under Project conditions as well as planned roadway improvements. Per City guidelines in the 2020 Transportation Analysis Handbook, proposed mitigation measures to address negative adverse effects at a study intersection should prioritize improvements related to alternative transportation modes, parking measures, and/or TDM measures with secondary improvements that increase vehicle capacity to the transportation network.

Project Intersection Adverse Effects

Based on City and CMP intersection operation threshold criteria described in Section 1, the project is not anticipated to generate an adverse effect to the study intersections during the Project scenario.

City Identified Bicycle / Pedestrian / Traffic Calming Improvements

As discussed in Section 3, the project would exceed the City's industrial VMT per employee threshold and would need to implement VMT reduction strategies to mitigate the impact. Per City request to improve multi-modal access, the project would need to coordinate with the City and implement the following improvements for VMT mitigation:

1. Construct raised crosswalks at the intersection corners of Silver Creek Valley Road / Piercy Road. Potential civil improvements such as drainage, signal, and utility modifications would be needed to implement the raised crosswalk for VMT mitigation.

2. Install Class IV protected bike lanes along the project frontage as well as Piercy Road from Hellyer Avenue to Silver Creek Valley Road per City of San Jose Better Bike Plan 2025. The project will be required to provide a monetary in-lieu fee contribution of $141 per linear foot (LF) for the Class IV protected bike lane along the Hellyer Avenue project frontage.

These multi-modal improvements would need to be coordinated between the project applicant and the City for approval.

City Identified Transit Improvements

The project is not anticipated to generate an adverse effect to the existing transit network during the Project scenario.

Edenvale Area Development Policy Traffic Fees

The project is located in Sub-Area 3, and per the EADP, the base maximum floor area ratio (FAR) is 0.40 for development. Based on the Project Description and latest site plan, the project site would have a FAR of 0.51 and would exceed the allowed FAR per the EADP.

To be consistent with the EADP, the project would need to pay a proportional fee contribution in accordance with the proposed project square footage and would need to be in conformance with the maximum FAR for Sub-Area 3.

6 LTA SITE ACCESS AND CIRCULATION

This chapter describes the local transportation analysis including site access and on-site circulation review, effects on bicycle, pedestrian, and transit facilities, construction operations, and neighborhood interface.

6.1 Driveway Site Access

It is anticipated that the project site will operate during normal business hours (8AM to 5PM). A majority of employees will access the site during the AM and PM peak. Truck deliveries to/from the project site is anticipated to occur throughout the day and most of the truck trips will occur outside of AM and PM peak.

Site access and circulation for the project is based on the latest site plan prepared by the project applicant and is included in the **Appendices**. The project provides on-site parking spaces for commercial delivery trucks and employee staff. The at-grade parking lots are accessed by the following driveways:

- **Driveway 1 at Hellyer Avenue**
  - Right In/Right Out access for passenger vehicles
  - 26-feet wide driveway
- **Driveway 2 at Piercy Road**
  - Full access for passenger and truck vehicles
  - 32-feet wide driveway

Per City guidance, driveways should be a minimum of 150 feet from any intersection, and the project satisfies this standard. The proposed driveway locations optimize sight distance and spacing for the proposed site plan. To improve vehicle sight distance of approaching pedestrians and bicycles on Hellyer Avenue and Piercy Road, it is recommended to provide low clearance landscaping between the back of curb on both sides of the driveway.

Per City Municipal Code 20.90.100 and Table 20-220, the minimum width of the proposed two-way drive aisle is 26-feet. The parking lot drive aisles for staff parking are dimensioned 26-feet wide while the drive aisles for truck deliveries are dimensioned 32-feet wide.

Project driveway 1 is designed for passenger vehicle access and satisfy the 26-feet wide City standard width cut. In addition, the standard parking spaces on-site are dimensioned 9-feet by 18-feet which satisfy City parking standards. Project driveway 2 is designed for passenger vehicle and truck access and is dimensioned 32-feet wide to allow heavy vehicles into the loading dock area.

The drive aisles from driveway 1 and driveway 2 connect at the loading dock area on the north side of the site. Access to the loading dock area will be augmented with automated steel rolling gates on the south drive aisle to restrict access for authorized employees and truck deliveries. Gate control at the loading dock area would be optimized to maintain security and the gate's rapid opening and closing cycle and 150-foot setback from the sidewalk would allow vehicles to access Project driveway 2 without blocking or impeding traffic flow on the City streets. Gate operations would be controlled with high-speed motors, intercom/keypad posts, and knox box for fire access.

Vehicles accessing the project driveways would be allowed to make turns in and out the site when there are sufficient vehicle gaps along Hellyer Avenue and Piercy Road. From the queue analysis results summarized in Section 5, inbound vehicle queues and delays are not expected to be significant issues. For outbound vehicles, on-site vehicle queues are expected during the AM and PM peak due to a combination of inherent unpredictability of vehicle arrivals at driveways, and the random occurrence of gaps in traffic; however, these conditions are typical of driveways in industrial areas.

6.2 Passenger Vehicle Access and Circulation

Vehicle maneuverability and access for the parking area was analyzed using AutoTURN software which measures design vehicle swept paths and turning through simulation and clearance checks. A passenger car design from the American Association of State Highway and Transportation Officials (AASHTO) was assessed for the internal parking area.

Analysis using the AASHTO template revealed that passenger vehicles could adequately access the driveways on Hellyer Avenue and Piercy Road, maneuver through the parking lot, and park in the stalls without conflicting into other vehicles or stationary objects. The proposed layout provides sufficient vehicle clearance.

6.3 Heavy Vehicle Truck Access and Circulation

Delivery trucks and heavy vehicles are currently prohibited from stopping or parking along Hellyer Avenue and Piercy Road along the project frontage. All delivery activity for the project would occur on-site in the designated loading areas.

Per City Municipal Code 20.90.410, a building intended for use by a manufacturing plant, storage facility, warehouse facility, goods display facility, retail store, wholesale store, market, hotel, hospital, mortuary, laundry, dry cleaning establishment, or other use having a floor area of 10,000 square-feet or more shall provide a minimum of one (1) off-street loading space, plus one additional such loading space for each 20,000 square-feet of floor area. The project provides at least 15 truck loading docks on-site and satisfies the City requirement.

The STAA truck based on AASHTO and the Caltrans Highway Design Manual was assumed as the maximum size delivery truck that would be allowed due to truck route and maneuverability constraints in the Edenvale Area and at the project driveway. Fire apparatus and garbage trucks were also checked for site access, and these vehicle dimensions were based on NCHRP 659 – Guide for the Geometric Design of Driveways.

STAA delivery trucks would be able to maneuver on Piercy Road adjacent to the project site and access the designated truck driveways to load/unload and exit the site. Analysis of the STAA vehicle template shows that trucks will have full access on-site and will not conflict with the proposed site features or other vehicles. For project driveway 2, a larger width than the typical 26-feet driveway dimension can be provided based on STAA vehicle templates to provide sufficient vehicle access and circulation for entering and exiting vehicles. A 32-foot width is proposed at these driveways.

Access to the truck loading docks from project driveway 2 will be controlled by automatic open/close gates. The AM and PM peak hour truck volume is approximately 4 trucks, or one truck every 15 minutes, that will access any of the project driveways. The time for the gate to open is estimated to be less than 2

minutes and therefore, the truck queues are not expected to exceed one (1) truck length. Given the storage length between each gate and the adjacent street, truck queues are not anticipated to extend in the adjacent street or impact traffic operations at the gated driveways.

Garbage and recycling bins are anticipated to be located near the loading docks in a designated trash enclosure nearest to driveway 2 along Piercy Road. Waste collection vehicles would be able to enter the project driveway to pick up bins and exit the site without conflict.

In the event of an emergency, it is assumed that fire apparatus vehicles will stage in the project parking lots, along Hellyer Avenue, or along Piercy Road. Existing fire hydrants along the project frontage provides direct fire access for emergency personnel. The project driveways are 26-feet wide minimum, provide at least 10-feet high clearance, and satisfies the 20-foot horizontal and 10-foot- vertical minimum access clearances from the 2016 CA Fire Code. Gate control for fire access will be provided with Knox boxes.

Figure 14 through **Figure 17** show site access and vehicle turn templates at the project driveway and on-site parking area for the design vehicles described above.

Figure 14: Passenger Vehicle Access

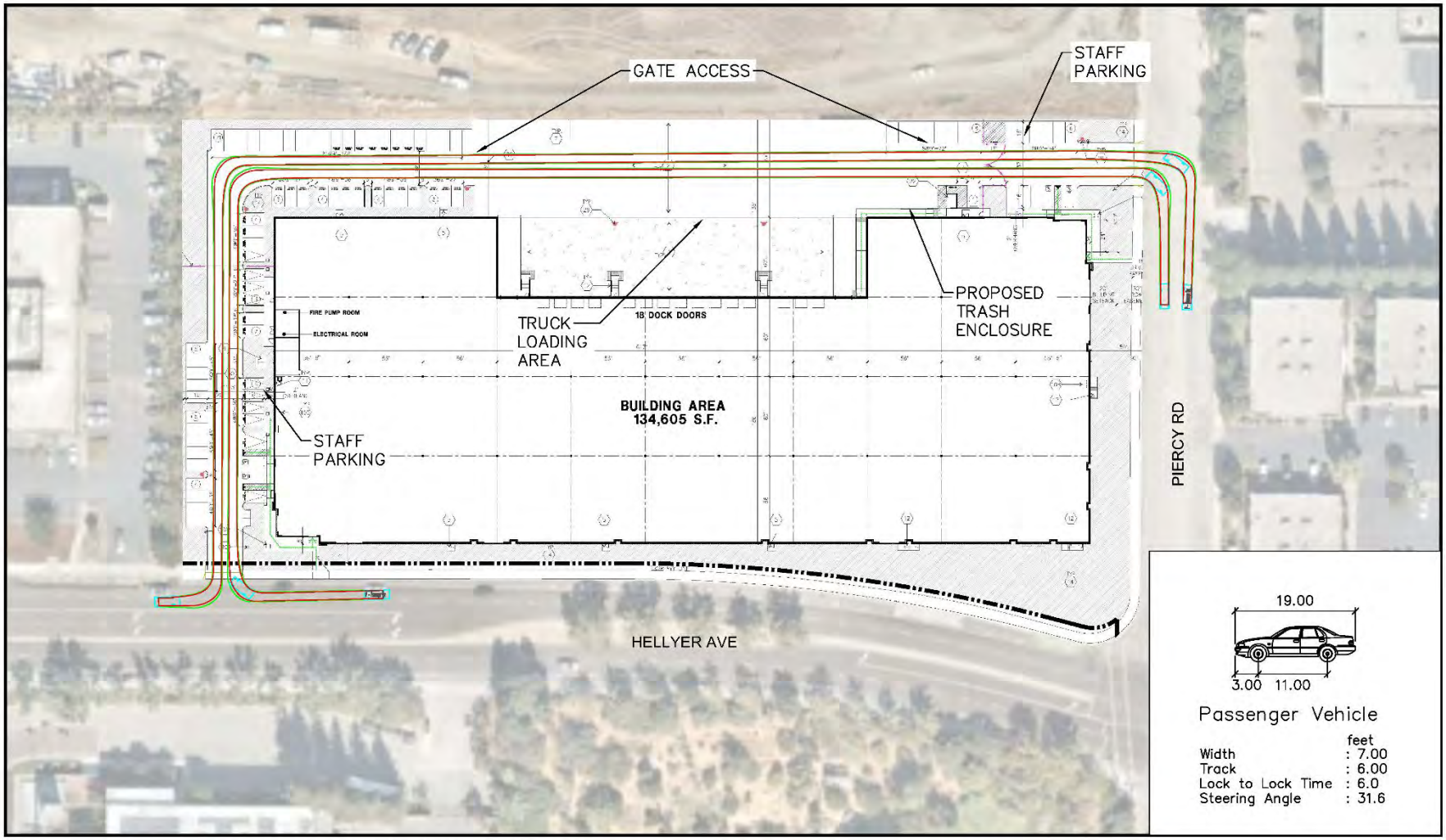


Figure 15: Delivery Truck Vehicle Access

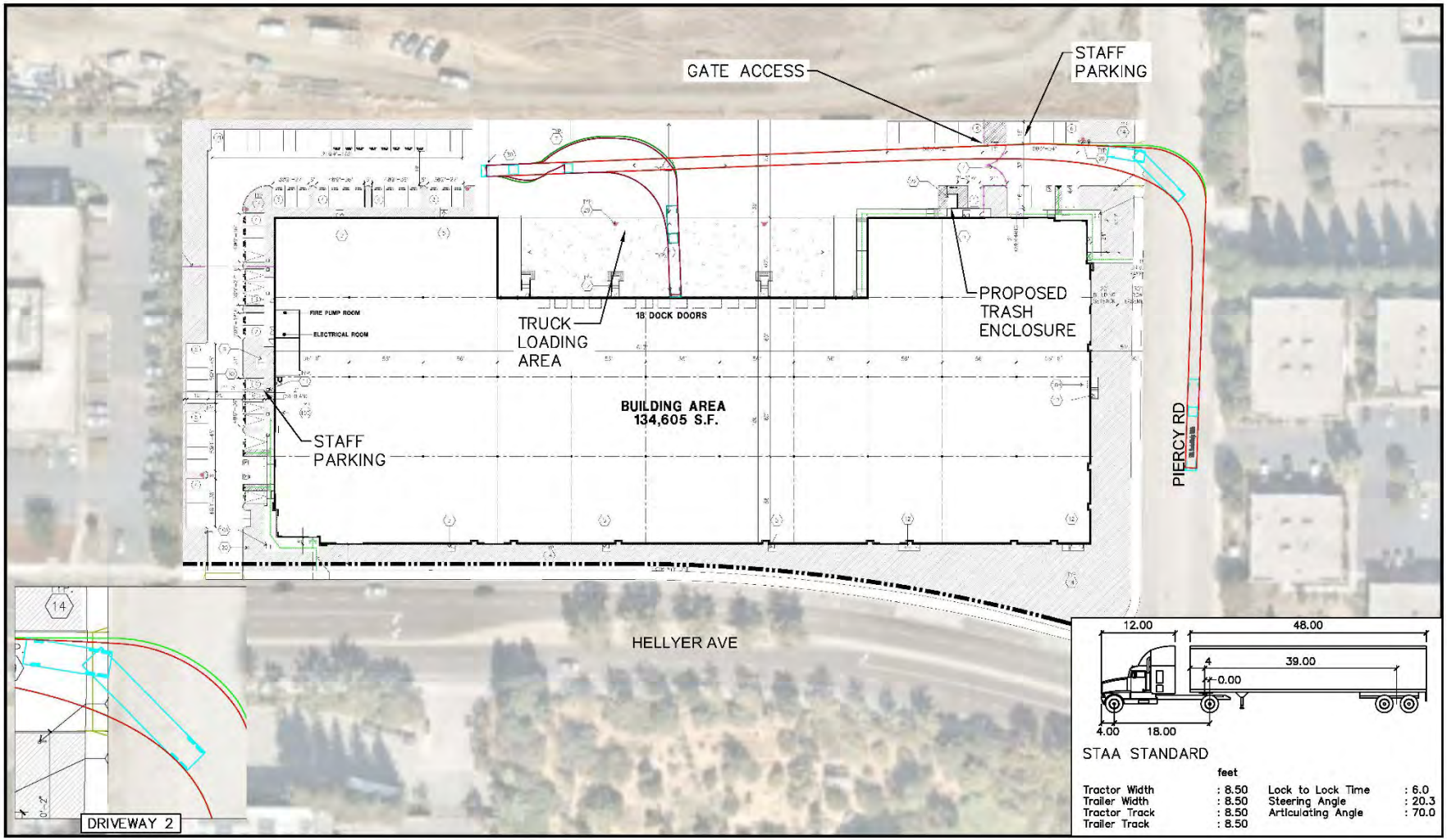


Figure 16: Garbage Truck Access

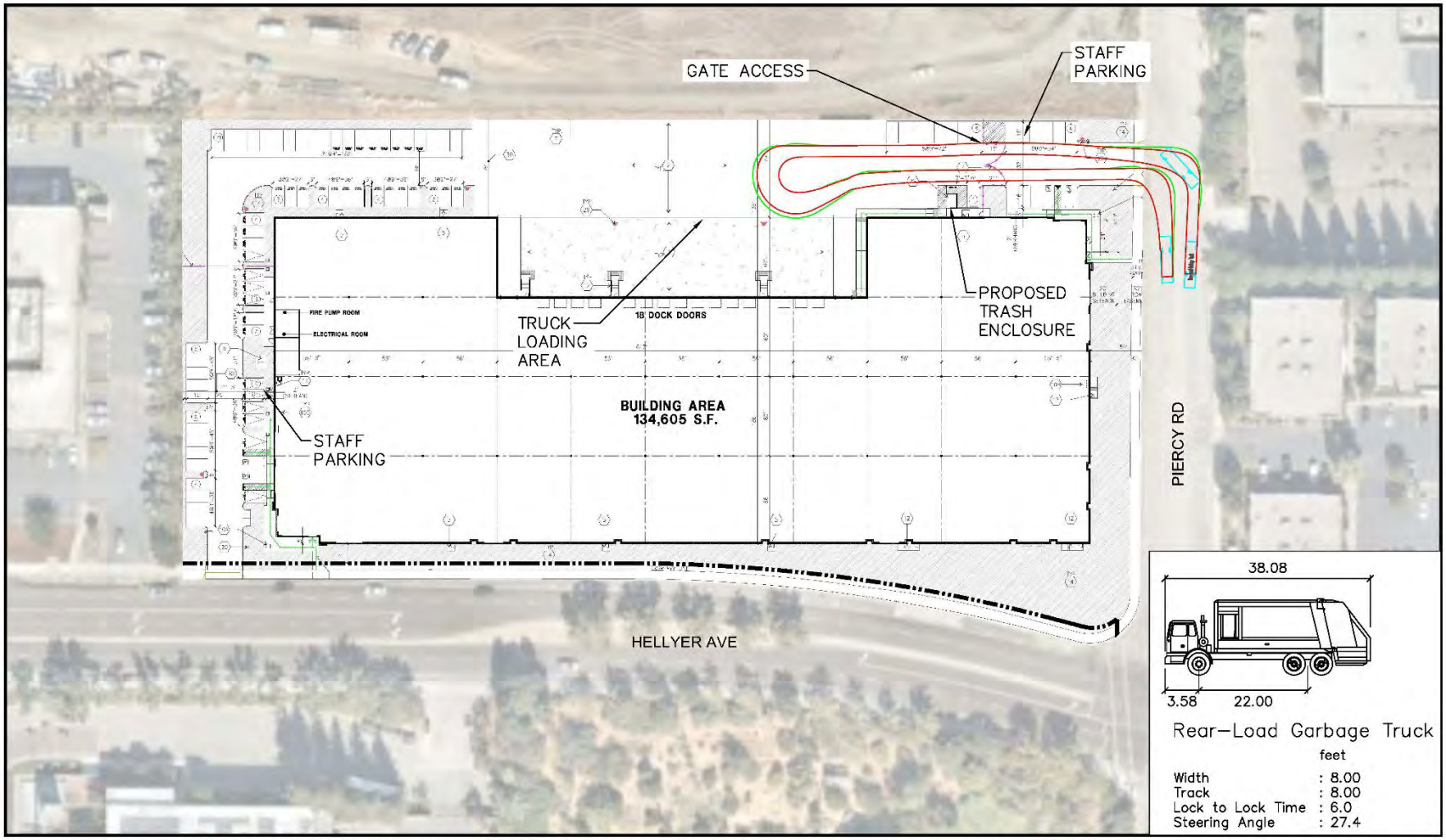
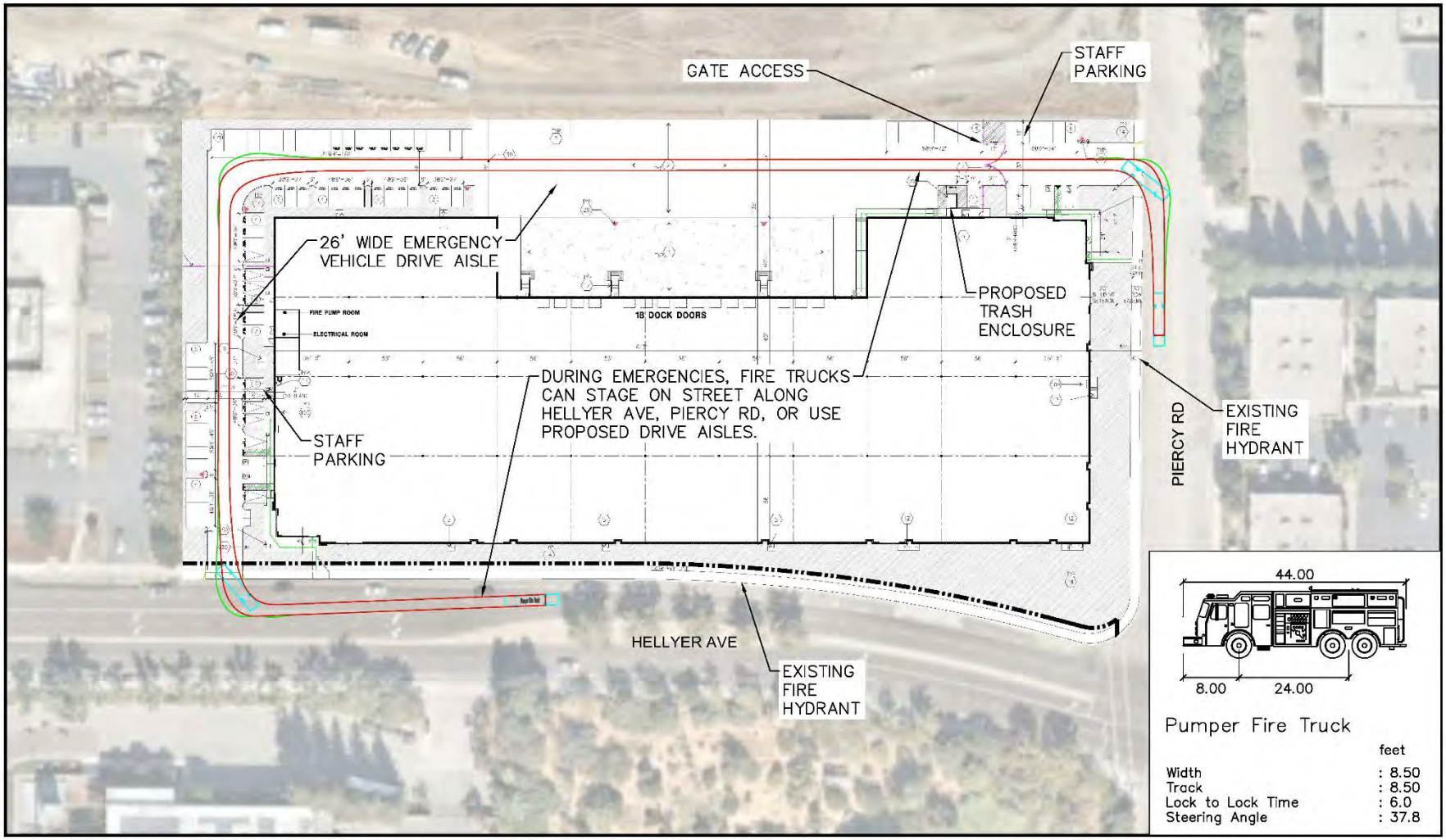


Figure 17: Fire Truck Access



6.4 Vehicle Sight Distance Analysis

A preliminary stopping sight distance (SSD) and intersection sight distance (ISD) analysis was conducted to determine the feasibility of the proposed project driveway location. The AASHTO methodology was used in this analysis. The sight distance needed under various assumptions of physical conditions and driver behavior is directly related to vehicle speeds and to the resultant distances traversed during perception-reaction time and braking.

Stopping sight distance is defined as the sum of reaction distance and braking distance. The reaction distance is based on the reaction time of the driver while the braking distance is dependent upon the vehicle speed and the coefficient of friction between the tires and roadway as the vehicle decelerates to a complete stop. This sight distance analysis indicates the minimum visibility that is required for an approaching vehicle to stop safely if a vehicle from the project driveway enters or exits the approaching road. The driver should also have an unobstructed view of the intersection, including any traffic-control devices, and sufficient lengths along the intersecting road to permit the driver to anticipate and avoid potential collisions.

For vehicles entering Hellyer Avenue and Piercy Road from the proposed project driveway, the AASHTO method evaluates sight distance from a vehicle exiting the driveway to a vehicle approaching from either direction. The intersection sight distance is defined along intersection approach legs and across their included corners known as departure sight triangles. These specified areas should be clear of obstructions that might block a driver's view of potentially conflicting vehicles. Intersection sight distance is measured from a point 3.5-feet above the existing grade (driver's eye) along the potential driveway to a 3.5-foot object height in the center of the approaching lane on the roadway. A vehicle setback in a stopped position from the edge of shoulder was assumed for determining intersection sight distance.

Project Driveway Sight Distance

Minimum sight distance criteria for the potential driveways along the study roadways was determined from the AASHTO Geometric Design of Highways and Streets 7th Edition (Green Book). For the purposes of this analysis, a design speed of 50 mph (45 mph posted speed limit) was assumed along Hellyer Avenue. Along Piercy Road, a design speed of 35 mph (30 mph posted speed limit) was assumed. AASHTO standard time gap variables for passenger cars stopped on the proposed project driveways were used. Based on the existing traffic control, minimum sight distance was calculated for the following scenarios:

- Stopping Sight Distance on Hellyer Avenue and Piercy Road
- Intersection Sight Distance Case B – Stop control at the proposed project driveways
    - Case B1 – Left turn from the minor road
    - Case B2 – Right turn from the minor road

Minimum SSD and ISD values were obtained from Table 9-7 and Table 9-9 of the AASHTO Green Book. A site visit was taken to measure the available sight distance and departure sight triangles at the proposed driveway locations. From a 5-foot setback from the edge of travel way, the measured available sight distance varies in each direction Hellyer Avenue and Piercy Road. **Table 11** summarizes the intersection and stopping sight distance at the project driveways.

Table 11: Project Driveway Sight Distance

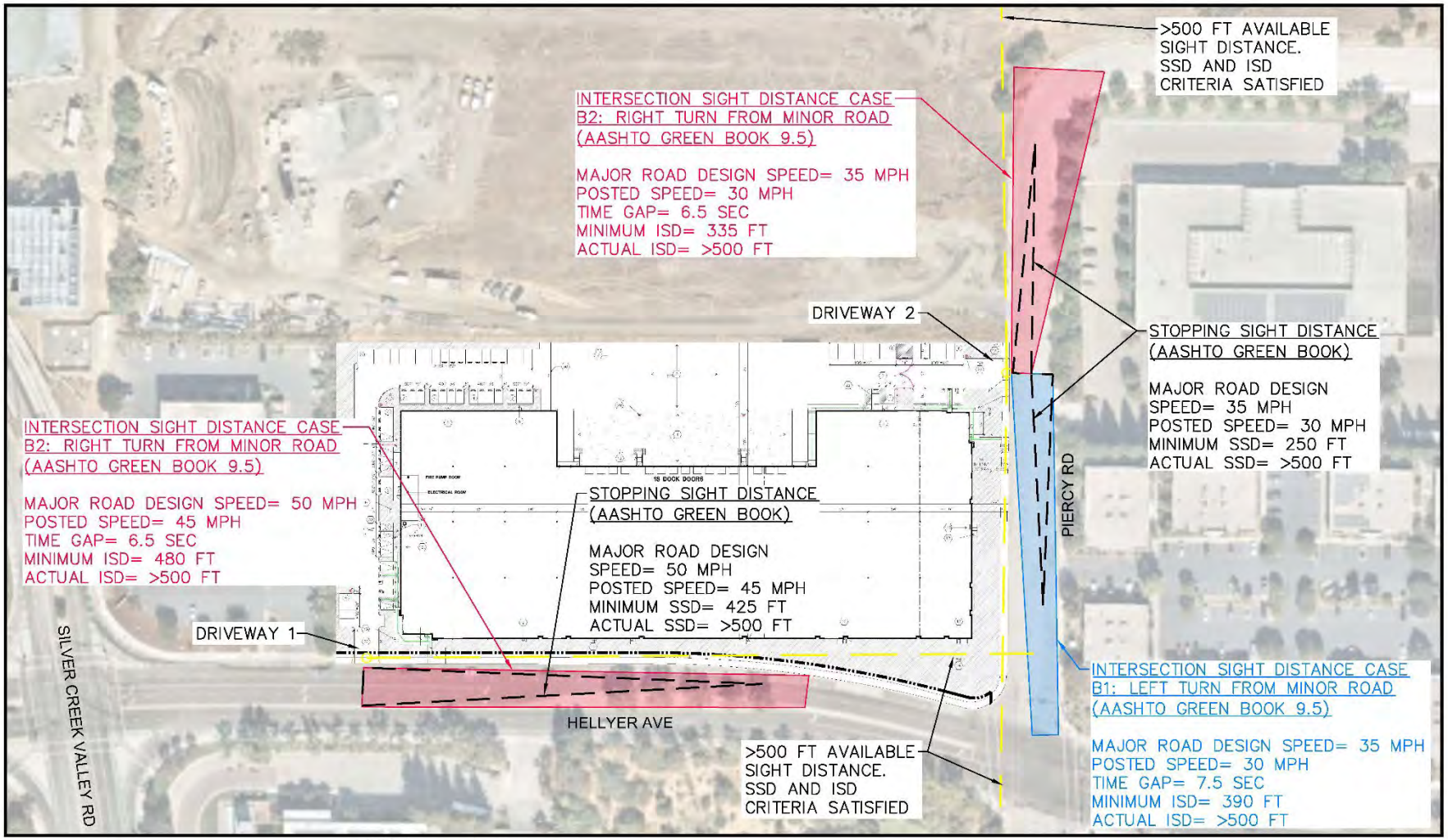
Type	Design Speed (MPH)	Required Sight Distance (ft)	Actual Sight Distance (ft)	Sufficient Sight Distance?
Hellyer Avenue (Project Driveways 1)				
SSD on Primary Road	50	425	>500	Yes
ISD Case B1 (Left Turn)	N/A	N/A	N/A	N/A
ISD Case B2 (Right Turn)	50	480	>500	Yes
Piercy Road (Project Driveways 3 & 4)				
SSD on Primary Road	35	250	>500	Yes
SSD Case B1 (Left Turn)	35	390	>500	Yes
ISD Case B2 (Right Turn)	35	335	>500	Yes

Note: Driveway 1 is right turn only access therefore ISD left turn is not applicable

The proposed project driveway locations satisfy the minimum stopping sight distance required for all approaches on Hellyer Avenue and Piercy Road. Vehicles on the road will have sufficient sight distance to react and stop safely if a vehicle from the project driveway enters or exits the road. Vehicles entering the City streets from the project driveway will also have sufficient intersection sight distance to make a left or right turn onto the road per AASHTO scenarios.

Overall, the proposed project driveway locations are feasible and provide sufficient sight distance for traffic conditions. To ensure that exiting vehicles can see bikes and vehicles traveling on the roadway, no parking striped with red curb should be established immediately adjacent to the project driveways. An exhibit comparing the design and measured available stopping and intersection sight distances is shown in **Figure 18.**

Figure 18: Sight Distance Analysis



6.5 Bicycle, Pedestrian, and Transit Access

To mitigate the project's VMT impact, the project will implement the following pedestrian and bicycle improvements within the project vicinity.

- Construct raised crosswalks at the intersection corners of Silver Creek Valley Road / Piercy Road.
- Install Class II bike lanes along the project frontage as well as Piercy Road from Hellyer Avenue to Silver Creek Valley Road per City of San Jose Better Bike Plan 2025

As stated in Section 2, the existing network of sidewalks and crosswalks in the study area are adequate with connectivity and walkable routes to nearby bus stops, retail, and other points of interest in the immediate project area. In addition, the nearest transit stops to the project site are located at the Hellyer/Piercy intersection which is less than quarter a mile away. As for bicycle connectivity, the Class I Coyote Creek Trail and Class II bike lanes on Silver Creek Valley Road and Hellyer Avenue provides bicycle facilities in the vicinity of the project site.

Due to the function and operational characteristics of the proposed industrial use, the project is not anticipated to add substantial project trips to the existing pedestrian, bicycle, or transit facilities in the area. Therefore, the project would not create an adverse effect to the existing pedestrian, bicycle, or transit facility operations.

6.6 Vehicle and Bicycle Parking

Per the Chapter 20.90.060, Table 20-190, and Table 20-210 of the San Jose Municipal Code, the proposed project land uses are required to provide the following minimum off-street parking:

- Offices, research and development (10,000 square feet total gross floor area)
    - One (1) vehicle parking space per 300 -square feet of total gross floor area
    - One (1) bicycle parking space per 4,000-square feet of total gross floor area
    - One (1) motorcycle parking space for every 10 code-required auto parking spaces

- Warehouse (134,605 square feet total gross floor area)
    - Two (2) vehicle parking spaces minimum for warehouses under 5,000-square feet of total gross floor area
    - Five (5) vehicle parking spaces minimum for warehouses between 5,000 and 25,000-square feet of total gross floor area
    - One (1) vehicle parking space per 5,000-square feet of total gross floor area for warehouses greater than 25,000-square feet
    - One (1) bicycle parking space per 10 full-time employees
    - One (1) shower for warehouses between 85,000 and 425,000-square feet
    - One (1) motorcycle parking space for every 10 code-required auto parking spaces

Based on these City ratios, the project is required to provide a minimum total of 49 off-street vehicle parking spaces and 10 bicycle parking spaces for the proposed industrial use.

The project site plan proposes a total parking supply of 86 vehicle spaces to accommodate tenant employees and a total bicycle parking supply of 10 spaces (5 short term racks and 5 long term locker spaces).

The project site plan is anticipated to provide sufficient vehicle and bicycle parking per the City's off-street parking requirement. **Table 12** summarize the vehicle and bicycle parking requirements for the project.

Table 12: Project Parking Summary

GUIDELINE SOURCE	PARKING TYPE	LAND USE	PARKING STANDARD PER GUIDELINE	PROJECT SIZE	VEHICLE PARKING (# SPACES)	BICYCLE PARKING (# SPACES)
San Jose Municipal Code	Vehicle	Warehouse	2 vehicle spaces for under 5,000 SQFT 5 vehicle spaces for under 25,000 SQFT 1 vehicle space per 5,000 SQFT for over 25,000 SQFT	134,605	29	-
		Office (General Business)	1 vehicle space per 250 SQFT	5,000	20	-
	Bicycle	Warehouse	1 bicycle space per 10 full time employees	80	-	8
		Office (General Business)	1 bicycle space per 4,000 SQFT	5,000	-	2
				Total Parking Requirement	**49**	**10**
				Proposed Parking Supply	**86**	**10**
				Sufficient Parking?	**YES**	**YES**
NOTES:						
SQFT = Square Feet; GFA = Gross Floor Area;						
Proposed parking supply based on project description from applicant						
Parking requirements based on San Jose Municipal Code						

6.7 Construction Operations

During project construction, the existing curb, gutter, and sidewalk along the project frontage would be widened and replaced. A Traffic Management Plan (TMP) should be developed for construction activities at the site. Prior to construction, the contractor should place temporary signs indicating closed sidewalk facilities, install a temporary screened fence around the work area, protect existing features/utilities, and repair any damaged improvements within public right of way per City of San Jose requirements.

Pedestrians and bicyclists would potentially not be able to travel on the east side of Hellyer Avenue or the north side of Piercy Road next to the project during construction and would need to use the existing facilities on the opposite side of the street.

Vehicle access along Piercy Road near the project may also be restricted during construction due to its 2-lane roadway cross-section. The through lanes on Piercy Road could be temporary closed, and the contractor should install appropriate MUTCD traffic control devices to warn approaching vehicles of temporary lane closures and lane merges prior to the project site.

It is assumed that a temporary construction vehicle parking and stage construction area would be provided on the project site. This potential parking area would require the contractor to obtain necessary approval, right of entry, and permits with the City and property owners prior to construction.

6.8 Neighborhood Interface

The proposed project is in the existing industrial district in the City and not located in the vicinity of schools or residential neighborhoods; therefore, the project is not anticipated to create an adverse effect to the existing school and neighborhood operations in the surrounding area. The project is located on commercial / industrial collector streets and would not promote excessive cut through traffic or vehicle speeding along the roadway network.

On-street parking in the surrounding roadway network is prohibited on Hellyer Avenue and Piercy Road. From the parking analysis, the project's on-site parking would satisfy the City's vehicle parking standard, and the project is not anticipated to create an adverse effect to the existing parking condition in the surrounding area.

From recent site visits and field observations, sidewalk and curb returns are provided in the area. The existing sidewalks in the area are at least four-feet wide and have either rolled or raised concrete curbs. ADA compliant curb ramps are also provided in the area. The project is not anticipated to create an adverse effect to the existing pedestrian and bicycle facilities in the surrounding neighborhood area.

7 CONCLUSIONS AND RECOMMENDATIONS

Project Vehicle Miles Traveled (VMT) Impacts and Mitigation Measures

The project consists of industrial land use and does not meet the screening criteria for VMT analysis exemption as a small infill project of 30,000 square-feet of total gross floor area or less per City guidelines. The proposed project was evaluated in the VMT tool assuming development of 134,605 square-feet of industrial use.

The City's VMT per employee threshold for industrial land uses is 14.37. For the surrounding land use area, the existing VMT is 14.67. The proposed project (APN 678-93-039) is anticipated to generate a VMT per employee of 14.62 (excluding any VMT reduction strategies). The evaluation tool estimates that the project would exceed the City's industrial VMT per employee threshold and would trigger a VMT impact.

Since the project VMT exceeds the industrial thresholds of significance, the project will need to mitigate its CEQA transportation impact by implementing a variety of City approved VMT reduction strategies. Per City direction, the applicant would implement Tier 2 multi-modal infrastructure improvements, and with these measures, the project could achieve a VMT per employee of 14.31 which is below the City threshold. Final implementation of the proposed VMT reduction strategies would need to be coordinated between the project applicant and the City.

The project would exceed the City's industrial VMT per employee threshold and would need to implement the following VMT reduction strategies to mitigate the impact and improve multi-modal access per City request:

- Construct raised crosswalks at the intersection corners of Silver Creek Valley Road / Piercy Road. Potential civil improvements such as drainage, signal, and utility modifications would be needed to implement the raised crosswalk for VMT mitigation.

- Install Class IV protected bike lanes along the project frontage as well as Piercy Road from Hellyer Avenue to Silver Creek Valley Road per City of San Jose Better Bike Plan 2025. The project will be required to provide a monetary in-lieu fee contribution of $141 per linear foot (LF) for the Class IV protected bike lane along the Hellyer Avenue project frontage.

Project Trip Generation

Trip generation for the proposed project land uses was calculated using average trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* (September 2021).

Per the 2020 *Transportation Analysis Handbook*, trip generation reduction credits were applied to the project including location-based mode-share, potential VMT reduction strategies, and existing land uses. Development of the proposed project with all applicable trip reductions and credits is anticipated to generate a net new total of 213 additional daily trips, 23 AM, and 21 PM peak hour trips to the roadway network.

Intersection Traffic Operations

It should be noted that the project is located in the Edenvale Area Development Policy (EADP) boundary. A prior traffic study (iStar Mixed-Use Development) was completed for the EADP and identified intersection improvements that have already been completed. Based on City direction and the 2014 EADP Update, the project is not required to study any signalized intersections and their adverse effects under project conditions. For informational purposes, intersection level of service operations analysis is shown for Existing, Background, and Cumulative Conditions.

Existing AM and PM peak-hour traffic volumes, intersection geometry, and traffic control were based on City of San Jose traffic database (Pre-COVID conditions) with a 1% compound growth rate applied at the study intersections. Year 2022 traffic count data was also collected but these counts yielded fewer traffic volumes than the Pre-COVID counts. Per City direction, the Pre-COVID counts applied with a growth factor was used to provide a conservative analysis. The study intersections were assessed under Existing, Background and Cumulative scenarios. City of San José and Valley Transportation Authority Congestion Management Program intersection level of service standards and significance thresholds were used to determine adverse effects caused by the project.

Adverse Effects and Improvements

The project is not anticipated to generate an adverse effect to the study intersections.

Per City request to improve multi-modal access, the project would need to coordinate with the City and implement the following improvements for VMT mitigation:

- Construct raised crosswalks at the intersection corners of Silver Creek Valley Road / Piercy Road. Potential civil improvements such as drainage, signal, and utility modifications would be needed to implement the raised crosswalk for VMT mitigation.

- Install Class IV protected bike lanes along the project frontage as well as Piercy Road from Hellyer Avenue to Silver Creek Valley Road per City of San Jose Better Bike Plan 2025. The project will be required to provide a monetary in-lieu fee contribution of $141 per linear foot (LF) for the Class IV protected bike lane along the Hellyer Avenue project frontage.

The project is located in Sub-Area 3, and per the EADP, the base maximum floor area ratio (FAR) is 0.40 for development. Based on the Project Description and latest site plan, the project site would have a FAR of 0.51 and would exceed the allowed FAR per the EADP.

To be consistent with the EADP, the project would need to pay a proportional fee contribution in accordance with the proposed project square footage and would need to be in conformance with the maximum FAR for Sub-Area 3.

Vehicle Site Access and Circulation

The site will be accessed from one (1) driveway along Hellyer Avenue and one (1) driveway along Piercy Road. Project driveways designed for truck access are 32-feet wide while passenger vehicle access driveways are 26-feet wide. Based on associated turning templates for the given design vehicle, the wider driveway dimensions proposed on the latest site plan are recommended to provide sufficient vehicle access and circulation for entering and exiting vehicles.

The proposed driveway locations optimize sight distance and spacing for the proposed site plan. Passenger vehicles, delivery trucks, refuse, and emergency vehicles are able to circulate within the project site without conflict.

Pedestrian, Bicycle, and Transit Site Access

Due to the function and operational characteristics of the proposed use, the project is not anticipated to add substantial project trips to the existing pedestrian, bicycle, or transit facilities in the area. Therefore, the project would not create an adverse effect to the existing pedestrian, bicycle, or transit facility operations.

On-Site Vehicle and Bicycle Parking

Per the City's parking standard, the project site is anticipated to provide sufficient on-site vehicle and bicycle parking to meet the City's minimum parking requirement.

Neighborhood Interface

The project's on-site parking would satisfy the City's vehicle parking standard, and the project is not anticipated to create an adverse effect to the existing parking condition in the surrounding area. The project is not anticipated to create an adverse effect to the existing pedestrian and bicycle facilities in the surrounding area.

8 APPENDICES

Appendices A –Project Site Plan
Appendices B – San Jose VMT Evaluation Tool Summary Report
Appendices C – Intersection, Roadway, and Freeway Traffic Counts
Appendices D – San Jose Approved Trip Inventory
Appendices E – TRAFFIX Intersection Operations Analysis
Appendices F – Warehouse Development Site Research

Appendices A – Project Site Plan

469 Piercy Road

San Jose

GENERAL

000-IDX		DRAWING SHEET INDEX

ARCHITECTURAL

001-TL	DAB-A0.1	TITLE SHEET
002-S	DAB-A1.1	OVERALL SITE PLAN
003-F	DAB-A1.2	FIRE ACCESS
004-A	DAB-A2.1	OVERALL FLOOR PLAN
005-A	DAB-A3.1	ELEVATIONS
006-DT	DAB-AD.1	DETAILS
016-A		COLOR ELEVATION
017-A		MATERIAL BOARD

CIVIL

007-C	C101	TOPOGRAPHIC SURVEY
008-C	C201	SECTIONS
009-C	C301	PRELIMINARY GRADING PLAN
010-U	C401	PRELIMINARY UTILITY PLAN
011-C	C501	PRELIMINARY EROSION CONTROL
012-C	C601	PRELIMINARY SWQP
013-N	C602	PRELIMINARY SWQP NOTES

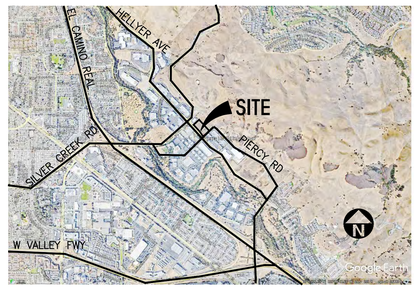
LANDSCAPE

014-L	LC1.1	PRELIMINARY LANDSCAPE PLAN
015A-L	LC1.2	PRELIMINARY LANDSCAPE PLAN
015-I	LC2.1	PRELIMINARY LANDSCAPE PLAN
016A-I	LC2.2	PRELIMINARY IRRIGATION PLAN

PHOTOMETRIC

016-U	E2.2	PHOTOMETRIC SITE STUDY PLAN

SHEET INDEX



VICINITY MAP

PROPERTY OWNER

XEBEC REALTY
PHONE: 562-284-5005
CONTACT: STEVEN CHRISTIE

APPLICANT'S REPRESENTATIVE

HPA, INC.
600 GRAND AVE, STE 302
OAKLAND, CA 94610
TEL: 949-862-2128
ATTN: DEBIE TRIANI

PROJECT REPRESENTATIVES

ADDRESS OF THE PROPERTY

469 PIERCY ROAD
SAN JOSE, CA 95138

ASSESSOR'S PARCEL NUMBER

67893039 & 67893040

LEGAL DESCRIPTION

SEE CIVIL PLANS

PROJECT DATA

CONSTRUCTION TYPE : III B
OCCUPANCY TYPE : S-1 ;
ACCESSORY OCCUPANCY B
SPRINKLER SYSTEM : YES, ESFR
ALLOWABLE AREA : UNLIMITED PER CBC 507.4
ACTUAL AREA : SEE TABULATION

ALLOWABLE STORY
PER CBC 507.4 : 1
ACTUAL STORY : 1

ALLOWABLE HEIGHT PER ZONING CODE : 50'
ACTUAL BUILDING HEIGHT : SEE TABULATION

PROJECT DESCRIPTION

NEW CONSTRUCTION OF 134,605 SF WAREHOUSE INCLUDING SITEWORK

SITE AREA		
In s.f.		258,215 s.f.
In acres		5.93 ac
BUILDING AREA		
Office		5,000 s.f.
Warehouse		129,605 s.f.
TOTAL		134,605 s.f.
FLOOR AREA RATIO		
allowed		10.00
actual		0.52
AUTO PARKING REQUIRED		
Office:	1 / 250 sf	17 stalls
Whse:	1/ 5000 sf	23 stalls
TOTAL		40 stalls
AUTO PARKING PROVIDED		
Standard		38 stalls
Accessible Van parking		2 stalls
Accessible parking		2 stalls
EV Capable (40% reach code)		35 stalls
EVSE - 10% reach code		9 stalls
-Accessible EVSE (9' x 18')		1 stalls
-Accessible VAN EVSE (12' x 18')		1 stalls
-Standard		8 stalls
TOTAL		86 stalls
BICYCLE PARKING REQUIRED		
Office (1/4,000 sf ; min 5 % CALGREEN)		5 stalls
Warehouse (1/10 employee; min 5 % CALGREE!		5 stalls
TOTAL		10 stalls
BICYCLE PARKING PROVIDED		
Short term		5 stalls
Long term		5 stalls
TOTAL		10 stalls
MOTORCYCLE PARKING REQUIRED		
Office (1/ 50 reqd. auto)		1 stalls
Warehouse (1/ 10 reqd. auto)		2 stalls
MOTORCYCLE PARKING PROVIDED		4 stalls
ZONING ORDINANCE FOR CITY		
Zoning Designation - Industrial park (IP)		
MAXIMUM BUILDING HEIGHT		
Allowed		50 ft
Actual top of parapet(1 story)		45 ft
SETBACKS		
Front / Street side	Side / Rear	
Building - 15'	0"	
passenger parking - 25'		
truck loading area - 60'		

PROJECT DATA

HPA architecture

hpa, inc.
600 Grand Ave, suite 302
oakland, ca
94610
tel: 949•863•1770
fax: 949•863•0851
email: hpa@hparchs.com

LICENSED ARCHITECT — TOM G. TRIANI — C-29451 — 3-31-23 — RENEWAL DATE: — STATE OF CALIFORNIA

Owner:

XEBEC

3010 Old Ranch Parkway, suite 470
Seal Beach, CA 90740
Tel: 562-284-5005

Project:

469 Piercy Rd

San Jose, CA

Consultants:

Civil :	KIER & WRIGHT
Structural :	
Mechanical :	
Plumbing :	
Electrical :	
Landscape :	GREEN DESIGN
Fire Protection :	
Solis Engineer :	

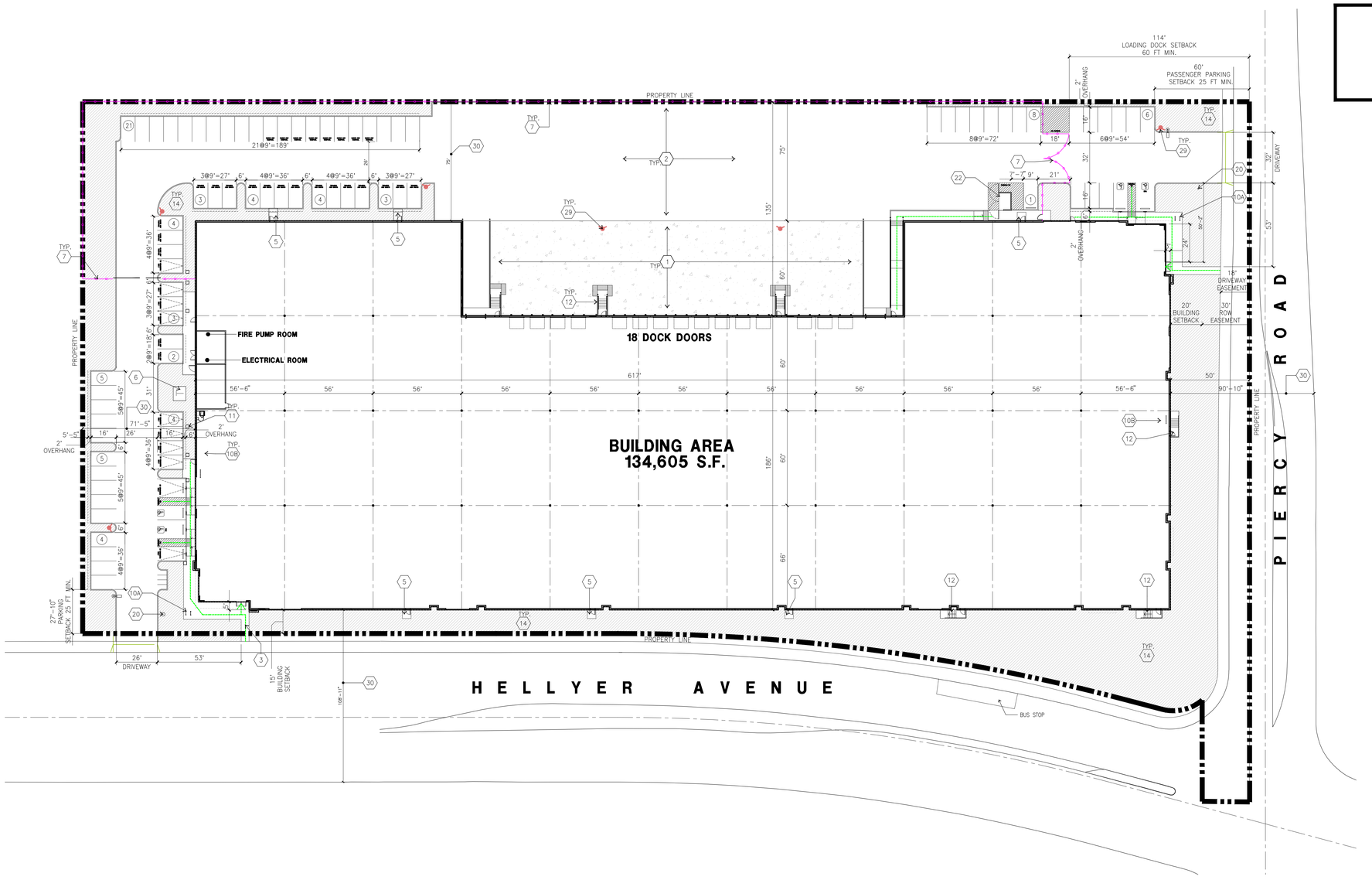
Title: TITLE SHEET

Project Number: 21234
Drawn by: KZ
Date: 08/06/2021

Revision:

Sheet:

DAB-A0.1



OVERALL SITE PLAN

scale: 1" = 30'-0"

SCALE: 1" = 30'-0"

0 30' 60' 90'

TRUE NORTH

SITE PLAN GENERAL NOTES

1. THE SITE PLAN BASED ON THE SOILS REPORT PREPARED BY GEOTECHNICAL ENGINEER, SEE COVER SHEET
2. IF SOILS ARE EXPANSIVE IN NATURE, USE STEEL REINFORCING FOR ALL SITE CONCRETE
3. ALL DIMENSIONS ARE TO THE FACE OF CONCRETE WALL, FACE OF CONCRETE CURB OR GRID LINE U.N.O.
4. SEE "C" PLANS FOR ALL CONCRETE CURBS, GUTTERS AND SWALES
5. PROVIDE STRUCTURAL CALCULATION AND CONSTRUCTION ANCHORAGE DETAIL FOR TRANSFORMER PRIOR TO INSTALLATION.
6. SEE "C" DRAWINGS FOR POINT OF CONNECTIONS TO OFF-SITE UTILITIES. CONTRACTOR SHALL VERIFY ACTUAL UTILITY LOCATIONS.
7. PROVIDE POSITIVE DRAINAGE AWAY FROM BLDG. SEE "C" DRAWINGS.
8. CONTRACTOR TO REFER TO "C" DRAWINGS FOR ALL HORIZONTAL CONTROL DIMENSIONS. SITE PLANS ARE FOR GUIDANCE AND STARTING LAYOUT POINTS.
9. SEE "C" DRAWINGS FOR FINISH GRADE ELEVATIONS.
10. CONCRETE SIDEWALKS TO BE A MINIMUM OF 4" THICK W/ TOOLED JOINTS AT 6' O.C. EXPANSION/CONSTRUCTION JOINTS SHALL BE A MAXIMUM 12' EA. WAY W/ 1:20 MAX. SLOPE. EXPANSION JOINTS TO HAVE COMPRESSIVE EXPANSION FILLER MATERIAL OF 1/4". FINISH TO BE A MEDIUM BROOM FINISH
11. U.N.O. PROVIDE KNOX BOXES AT ALL OFFICE ENTRANCES.
12. PAINT CURBS AND PROVIDE SIGNS TO INFORM OF FIRE LANES AS REQUIRED BY FIRE DEPARTMENT.
13. ON-SITE FIRE MAIN, FIRE SPRINKLER, AND SPRINKLER MONITORING SYSTEM SHALL BE SUBMITTED SEPARATELY TO THE FIRE DEPARTMENT FOR REVIEW AND PERMITTING.
14. ALL VERTICAL MOUNTING POLES OF FENCING SHALL BE CAPPED.
15. LANDSCAPED AREAS SHALL BE DELINEATED WITH A MINIMUM SIX INCHES (6") HIGH CURB
16. ALL INTERIOR AND EXTERIOR WALK SURFACES TO BE NON-SLIP TYPE
17. PROVIDE BOLLARDS AROUND THE HYDRANTS AND RISERS FOR PROTECTION.
18. ONLY LIGHT LOAD CONCRETE TRUCKS (8 CUBIC YARDS MAX.) ARE ALLOWED ON THE WAREHOUSE SLABS.
19. CONCRETE POUR STRIP AT DOCK DOORS TO BE FREE AND CLEAR OF ALL UNDERGROUND PIPING, CONDUITS, ETC. TO ALLOW FOR FUTURE RECESSED DOCK LEVELERS (MINIMUM 10' WIDE). CONDUIT TO BE PLACED IN THE POUR STRIP WITH THE LOADING DOCKS SHALL BE A MINIMUM OF 42" BELOW FINISH FLOOR.

SITE PLAN KEYNOTES

1. HEAVY BROOM FINISH CONCRETE PAVEMENT. SEE "C" DRAWINGS.
2. ASPHALT CONCRETE (AC) PAVING
3. ACCESSIBLE PATH OF TRAVEL
4. DRIVEWAY APRONS TO BE CONSTRUCTED PER "C" AND "L" DRAWINGS.
5. 5'-6"X5'-6"X4" THICK CONCRETE EXTERIOR LANDING PAD TYP. AT ALL EXTERIOR MAN DOORS TO LANDSCAPED AREAS. FINISH TO BE MEDIUM BROOM FINISH SLOPE TO BE 1/4" : 12" MAX.
6. APPROXIMATE LOCATION OF TRANSFORMER. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY
7. 8' HIGH METAL FENCE AND GATES W/ KNOX-BOX PER FIRE DEPARTMENT . SEE DETAIL 13/DAB- AD.1
8. CONCRETE WALKWAY, MEDIUM BROOM FINISH.
9. CONCRETE RAMP WITH CONCRETE GUARD WALL.
10A. LONG TERM BIKE RACK. SEE 16/DAB-AD.1
10B. SHORT TERM BIKE RACK, SEE DETAIL 16/DAB-AD.1
11. ELECTRIC VEHICLE CHARGER.
12. EXTERIOR CONCRETE STAIR.
13. 12' x 16' DRIVE-IN DOOR
14. LANDSCAPE. ALL LANDSCAPE AREAS INDICATED BY SHADING
15. CONC. FILLED GUARD POST 6" DIA. U.N.O. 48" H.
16. PRE-CAST CONC. WHEEL STOP.
17. TRUNCATED DOMES.
18. ACCESSIBLE PARKING STALL SIGN.
19. HARDSCAPE AT ENTRANCE. SEE "L" DRAWINGS.
20. ACCESSIBLE ENTRY SIGN.
21. PUMP ROOM.
22. TRASH ENCLOSURE. SEE DETAIL SHEET DAB-AD.1
23. ELECTRICAL ROOM.
24. CONCRETE DOLLY PAD. SEE SITE PLAN FOR WIDTH AND "C" DRAWINGS.
27. EXTERIOR PARKING LIGHT POLE. SEE "E" AND "S" DRAWINGS
28. STORM TREATMENT, SEE "C" DRAWINGS
29. APPROXIMATE LOCATION OF FIRE HYDRANT. SEE "C" AND "FP" DRAWINGS. PROVIDE CONCRETE BOLLARD PROTECTION AS REQUIRED.
30. 60 FT MIN SEPARATION DISTANCE PER UNLIMITED BUILDING AREA REQUIREMENT

SITE PLAN GENERAL NOTES

- CONCRETE PAVING. SEE "C" DRWGS. FOR THICKNESS
- LANDSCAPED AREA
- STANDARD PARKING STALL (9' X 16') W/ 2 FT OVERHANG
- CLEAN AIR/ VANPOOL/EV WITH ELECTRIC VEHICLE SUPPLY EQUIPMENT
- CLEAN AIR/ VANPOOL/EV WITH CONDUIT STUB FOR FUTURE EV
- 26' FIRE LANE
- COMPACT PARKING STALL 8' X 16' W/ 2 FT OVERHANG
- ACCESSIBLE PARKING STALL (9' X 18') + 5' WIDE ACCESSIBLE AISLE
- ACCESSIBLE PARKING (VAN) STALL (12' X 18') + 5' WIDE ACCESSIBLE AISLE
- ACCESSIBLE PATH OF TRAVEL MIN. WIDTH TO BE 48" SLOPE NOT TO EXCEED 5% IN THE DIRECTION OF TRAVEL AND CROSS SLOPE NOT TO EXCEED 2 % . SEE CIVIL DRAWINGS FOR GRADING PLAN
- FIRE STRIPING LINE
- FENCE LINE

HPA architecture

hpa, inc.
600 Grand Ave, suite 302
oakland, ca
94610
tel: 949•863•1770
fax: 949•863•0851
email: hpa@hparchs.com

LICENSED ARCHITECT TONG I. PAN C-29451 3-31-23 RENEWAL DATE STATE OF CALIFORNIA

Owner:

XEBEC

3010 Old Ranch Parkway, suite 470
Seal Beach, CA 90740
Tel: 562-284-5005

Project:

469 Piercy Rd

San Jose, CA

Consultants:

Civil :	KIER & WRIGHT
Structural :	
Mechanical :	
Plumbing :	
Electrical :	
Landscape :	GREEN DESIGN
Fire Protection :	
Soils Engineer :	

Title: OVERALL SITE PLAN

Project Number:	21234
Drawn by:	KZ
Date:	08/06/2021
Revision:	

Sheet:

DAB-A1.1

Appendices B – San Jose VMT Evaluation Tool Summary Report

CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

PROJECT:

Name: 469 Piercy Road
Location: 469 Piercy Road
Parcel: 67893039 Parcel Type: Suburb with Single-Family Homes

Tool Version: 2/29/2019
Date: 3/22/2023

Proposed Parking Spaces Vehicles: 86 Bicycles: 10

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:	134.6 KSF		

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density
- Existing Density (DU/Residential Acres in half-mile buffer) 2
- With Project Density (DU/Residential Acres in half-mile buffer) 2

Increase Development Diversity
- Existing Activity Mix Index 0.76
- With Project Activity Mix Index 0.76

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) 21
- With Project Density (Jobs/Commercial Acres in half-mile buffer) 24

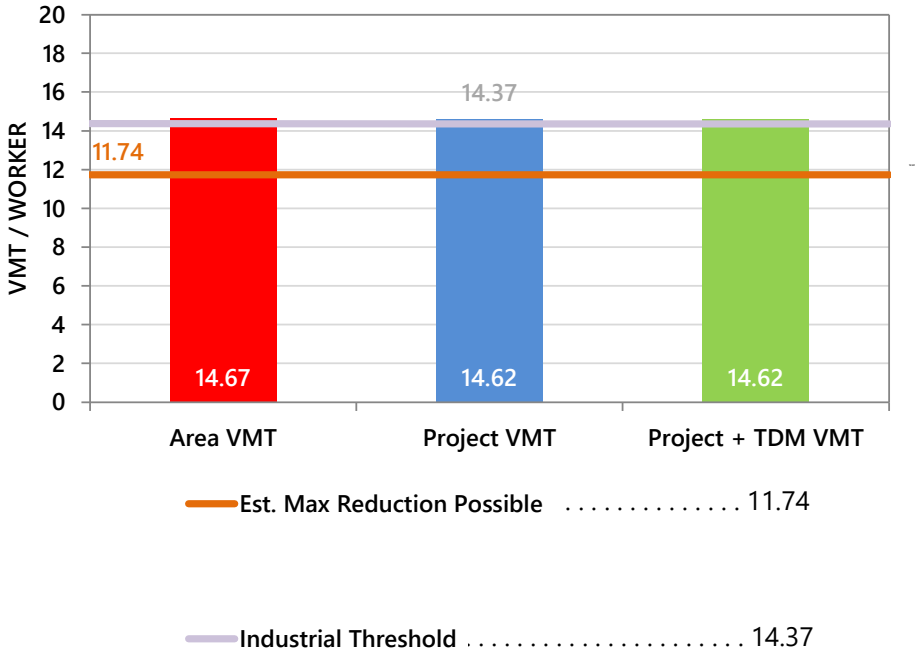
Tier 2 - Multimodal Infrastructure

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: 469 Piercy Road - Mitigated
Location: 469 Piercy Road
Parcel: 67893039 Parcel Type: Suburb with Single-Family Homes

Tool Version: 2/29/2019
Date: 3/22/2023

Proposed Parking Spaces Vehicles: 86 Bicycles: 10

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:	134.6 KSF		

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density
- Existing Density (DU/Residential Acres in half-mile buffer) 2
- With Project Density (DU/Residential Acres in half-mile buffer) 2

Increase Development Diversity
- Existing Activity Mix Index 0.76
- With Project Activity Mix Index 0.76

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) 21
- With Project Density (Jobs/Commercial Acres in half-mile buffer) 24

Tier 2 - Multimodal Infrastructure

Bike Access Improvements *(In Coordination with SJ)*
- Distance to Nearest Existing Bicycle Facility . . . . . 2000 feet
- Distance to Nearest Bicycle Facility With Project . . . . . 100 feet

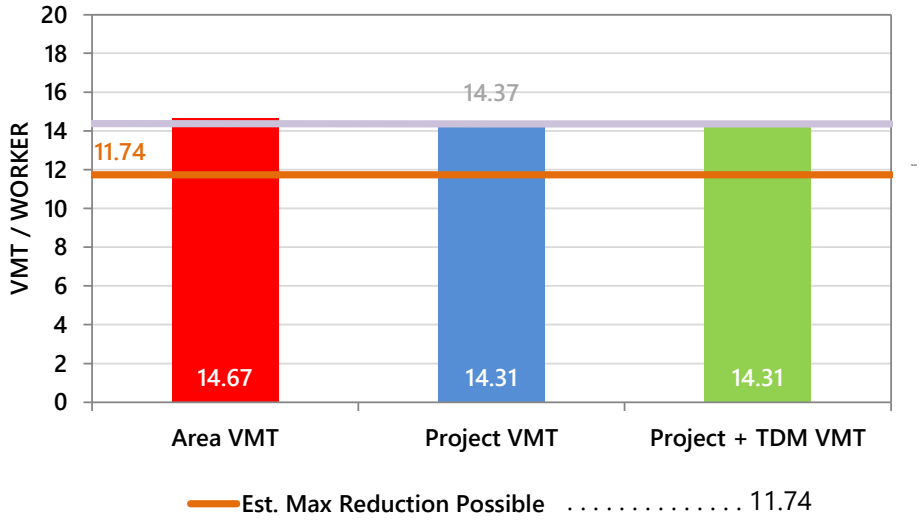
Pedestrian Network Improvements *(In Coordination with SJ)*
- Are pedestrian improvements provided beyond the development frontage? . . . . . Yes

Tier 3 - Parking

Tier 4 - TDM Programs

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.



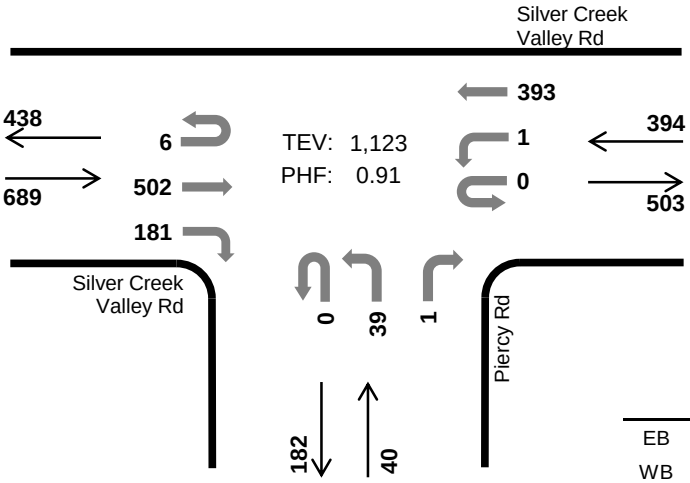
Appendices C – Intersection, Roadway, and Freeway Traffic Counts

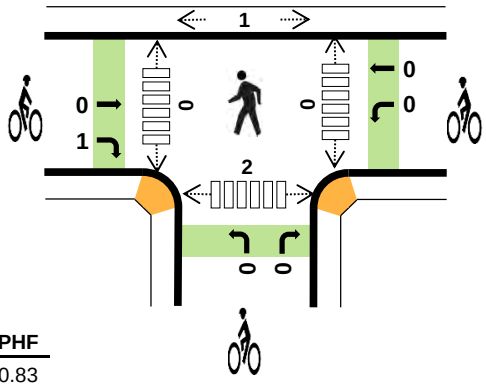
Piercy Rd
Silver Creek Valley Rd

N

Peak Hour

Date: 01/19/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	1.6%	0.83
WB	2.0%	0.78
NB	5.0%	0.71
SB	-	-
TOTAL	1.9%	0.91

Two-Hour Count Summaries

Interval Start		Silver Creek Valley Rd Eastbound				Silver Creek Valley Rd Westbound				Piercy Rd Northbound				n/a Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	61	30	0	1	75	0	0	11	0	1	0	0	0	0	179	0
7:15 AM		0	0	82	31	0	0	74	0	0	8	0	0	0	0	0	0	195	0
7:30 AM		2	0	115	27	0	0	87	0	0	8	0	0	0	0	0	0	239	0
7:45 AM		**3**	**0**	**148**	**57**	**0**	**0**	**83**	**0**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**305**	918
8:00 AM		**0**	**0**	**129**	**46**	**0**	**0**	**126**	**0**	**0**	**6**	**0**	**1**	**0**	**0**	**0**	**0**	**308**	1,047
8:15 AM		**1**	**0**	**108**	**35**	**0**	**0**	**96**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**249**	1,101
8:30 AM		**2**	**0**	**117**	**43**	**0**	**1**	**88**	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**261**	**1,123**
8:45 AM		1	0	112	39	0	0	69	0	0	9	0	1	0	0	0	0	231	1,049
Count Total		9	0	872	308	0	2	698	0	0	75	0	3	0	0	0	0	1,967	0
Peak Hour	**All**	**6**	**0**	**502**	**181**	**0**	**1**	**393**	**0**	**0**	**39**	**0**	**1**	**0**	**0**	**0**	**0**	**1,123**	**0**
	HV	**0**	**0**	**11**	**0**	**0**	**0**	**8**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	**0**
	HV%	**0%**	**-**	**2%**	**0%**	**-**	**0%**	**2%**	**-**	**-**	**5%**	**-**	**0%**	**-**	**-**	**-**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	2	*2*
7:15 AM	2	2	0	0	*4*	0	0	0	0	*0*	0	0	0	1	*1*
7:30 AM	3	1	1	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	**3**	**1**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
8:00 AM	**3**	**5**	**1**	**0**	***9***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**2**	**2**	**1**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	*2*
8:30 AM	**3**	**0**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:45 AM	5	1	0	0	*6*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	22	12	3	0	*37*	1	0	0	0	*1*	0	0	1	5	*6*
Peak Hr	**11**	**8**	**2**	**0**	***21***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**1**	**2**	***3***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Silver Creek Valley Rd				Silver Creek Valley Rd				Piercy Rd				n/a				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0
7:30 AM	0	0	3	0	0	0	1	0	0	1	0	0	0	0	0	0	5	0
7:45 AM	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	14
8:00 AM	**0**	**0**	**3**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	22
8:15 AM	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	23
8:30 AM	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**21**
8:45 AM	0	0	3	2	0	0	1	0	0	0	0	0	0	0	0	0	6	23
Count Total	0	0	20	2	0	0	12	0	0	3	0	0	0	0	0	0	37	0
Peak Hour	**0**	**0**	**11**	**0**	**0**	**0**	**8**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Silver Creek Valley Rd			Silver Creek Valley Rd			Piercy Rd			n/a			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	1	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

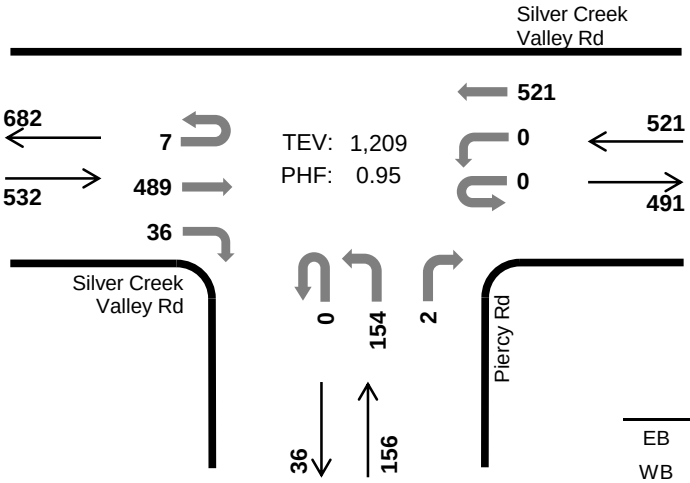
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

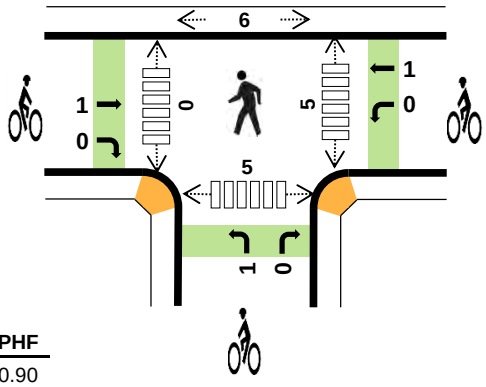
Piercy Rd
Silver Creek Valley Rd

N

Peak Hour

Date: 01/19/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	1.9%	0.90
WB	1.0%	0.89
NB	1.9%	0.89
SB	-	-
TOTAL	1.5%	0.95

Two-Hour Count Summaries

Interval Start		Silver Creek Valley Rd Eastbound				Silver Creek Valley Rd Westbound				Piercy Rd Northbound				n/a Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		1	0	101	13	0	0	137	0	0	41	0	0	0	0	0	0	293	0
4:15 PM		0	0	122	12	0	1	98	0	0	38	0	1	0	0	0	0	272	0
4:30 PM		**1**	**0**	**103**	**14**	**0**	**0**	**114**	**0**	**0**	**37**	**0**	**0**	**0**	**0**	**0**	**0**	**269**	0
4:45 PM		**1**	**0**	**137**	**5**	**0**	**0**	**130**	**0**	**0**	**44**	**0**	**0**	**0**	**0**	**0**	**0**	**317**	1,151
5:00 PM		**1**	**0**	**113**	**10**	**0**	**0**	**146**	**0**	**0**	**37**	**0**	**1**	**0**	**0**	**0**	**0**	**308**	1,166
5:15 PM		**4**	**0**	**136**	**7**	**0**	**0**	**131**	**0**	**0**	**36**	**0**	**1**	**0**	**0**	**0**	**0**	**315**	**1,209**
5:30 PM		0	0	111	13	0	1	109	0	0	30	0	1	0	0	0	0	265	1,205
5:45 PM		2	0	122	13	0	1	97	0	0	33	0	0	0	0	0	0	268	1,156
Count Total		10	0	945	87	0	3	962	0	0	296	0	4	0	0	0	0	2,307	0
Peak Hour	**All**	**7**	**0**	**489**	**36**	**0**	**0**	**521**	**0**	**0**	**154**	**0**	**2**	**0**	**0**	**0**	**0**	**1,209**	**0**
	HV	**0**	**0**	**9**	**1**	**0**	**0**	**5**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**0**
	HV%	**0%**	**-**	**2%**	**3%**	**-**	**-**	**1%**	**-**	**-**	**2%**	**-**	**0%**	**-**	**-**	**-**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	2	1	0	*3*	0	0	0	0	*0*	0	0	0	2	*2*
4:15 PM	1	1	1	0	*3*	0	0	0	0	*0*	0	0	0	1	*1*
4:30 PM	**3**	**0**	**2**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**2**	**0**	*4*
4:45 PM	**2**	**1**	**0**	**0**	***3***	**1**	**0**	**1**	**0**	***2***	**0**	**0**	**1**	**1**	*2*
5:00 PM	**2**	**1**	**1**	**0**	***4***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	*1*
5:15 PM	**3**	**3**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**3**	**0**	**3**	**3**	***9***
5:30 PM	3	0	1	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	1	1	1	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	15	9	7	0	*31*	1	1	1	0	*3*	5	0	6	8	*19*
Peak Hr	**10**	**5**	**3**	**0**	***18***	**1**	**1**	**1**	**0**	***3***	**5**	**0**	**6**	**5**	***16***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Silver Creek Valley Rd				Silver Creek Valley Rd				Piercy Rd				n/a				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	3	0
4:15 PM	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	3	0
4:30 PM	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	0
4:45 PM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	14
5:00 PM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	15
5:15 PM	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**18**
5:30 PM	0	0	1	2	0	0	0	0	0	1	0	0	0	0	0	0	4	17
5:45 PM	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	3	17
Count Total	0	0	10	5	0	0	9	0	0	7	0	0	0	0	0	0	31	0
Peak Hour	**0**	**0**	**9**	**1**	**0**	**0**	**5**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**0**

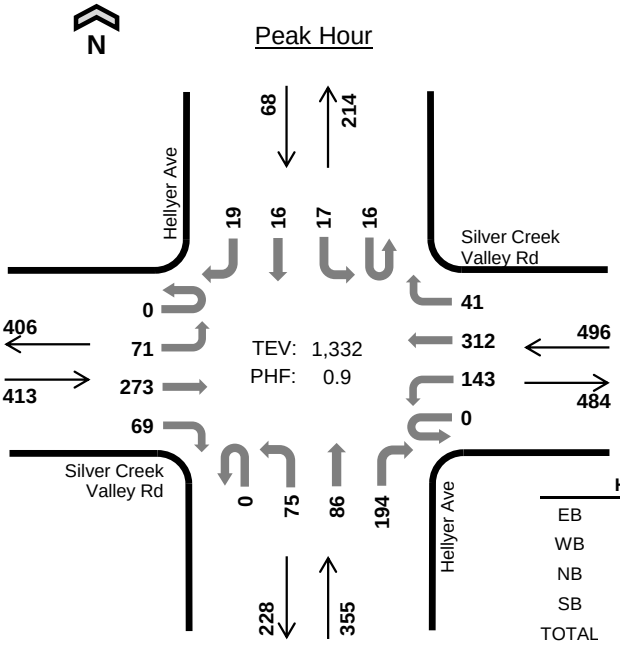
Two-Hour Count Summaries - Bikes

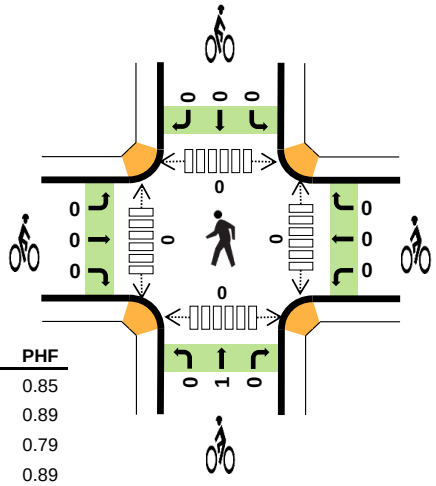
Interval Start	Silver Creek Valley Rd			Silver Creek Valley Rd			Piercy Rd			n/a			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	2
5:00 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	1	0	0	1	0	1	0	0	0	0	0	3	0
Peak Hour	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Hellyer Ave
Silver Creek Valley Rd

Date: 01/19/2022
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	2.4%	0.85
WB	0.6%	0.89
NB	2.3%	0.79
SB	8.8%	0.89
TOTAL	2.0%	0.90

Two-Hour Count Summaries

Interval Start	Silver Creek Valley Rd Eastbound				Silver Creek Valley Rd Westbound				Hellyer Ave Northbound				Hellyer Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	1	15	27	9	0	16	56	9	1	9	14	25	1	1	5	5	194	0
7:15 AM	0	19	52	6	0	37	62	8	0	13	15	29	1	0	3	5	250	0
7:30 AM	**0**	**13**	**74**	**14**	**0**	**30**	**64**	**6**	**0**	**15**	**15**	**54**	**2**	**4**	**3**	**5**	**299**	0
7:45 AM	**0**	**23**	**79**	**20**	**0**	**44**	**83**	**13**	**0**	**10**	**17**	**56**	**6**	**4**	**3**	**3**	**361**	1,104
8:00 AM	**0**	**19**	**59**	**26**	**0**	**33**	**91**	**9**	**0**	**30**	**30**	**52**	**4**	**6**	**5**	**4**	**368**	1,278
8:15 AM	**0**	**16**	**61**	**9**	**0**	**36**	**74**	**13**	**0**	**20**	**24**	**32**	**4**	**3**	**5**	**7**	**304**	**1,332**
8:30 AM	0	23	62	11	1	36	75	12	0	2	19	33	5	6	6	8	299	1,332
8:45 AM	0	28	54	15	0	40	55	14	0	8	32	47	6	1	11	3	314	1,285
Count Total	1	156	468	110	1	272	560	84	1	107	166	328	29	25	41	40	2,389	0
Peak Hour All	**0**	**71**	**273**	**69**	**0**	**143**	**312**	**41**	**0**	**75**	**86**	**194**	**16**	**17**	**16**	**19**	**1,332**	**0**
Peak Hour HV	**0**	**3**	**5**	**2**	**0**	**2**	**1**	**0**	**0**	**5**	**2**	**1**	**1**	**1**	**2**	**2**	**27**	**0**
Peak Hour HV%	**-**	**4%**	**2%**	**3%**	**-**	**1%**	**0%**	**0%**	**-**	**7%**	**2%**	**1%**	**6%**	**6%**	**13%**	**11%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	0	1	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	3	0	2	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**3**	**0**	**1**	**0**	***4***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**1**	**1**	**2**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**4**	**2**	**2**	**3**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**2**	**0**	**3**	**3**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	3	0	0	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	3	1	1	0	*5*	0	0	0	0	*0*	0	1	0	0	*1*
Count Total	20	4	12	6	*42*	0	0	1	0	*1*	0	1	0	0	*1*
Peak Hour	**10**	**3**	**8**	**6**	***27***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Silver Creek Valley Rd				Silver Creek Valley Rd				Hellyer Ave				Hellyer Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0
7:15 AM	0	1	0	2	0	0	0	0	0	1	1	0	0	0	0	0	5	0
7:30 AM	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	0
7:45 AM	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	15
8:00 AM	**0**	**2**	**2**	**0**	**0**	**1**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**1**	**11**	24
8:15 AM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**1**	**1**	**0**	**1**	**1**	**8**	**27**
8:30 AM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3	26
8:45 AM	0	2	0	1	0	0	1	0	0	0	1	0	0	0	0	0	5	27
Count Total	0	6	8	6	0	2	2	0	0	7	4	1	1	1	2	2	42	0
Peak Hour	**0**	**3**	**5**	**2**	**0**	**2**	**1**	**0**	**0**	**5**	**2**	**1**	**1**	**1**	**2**	**2**	**27**	**0**

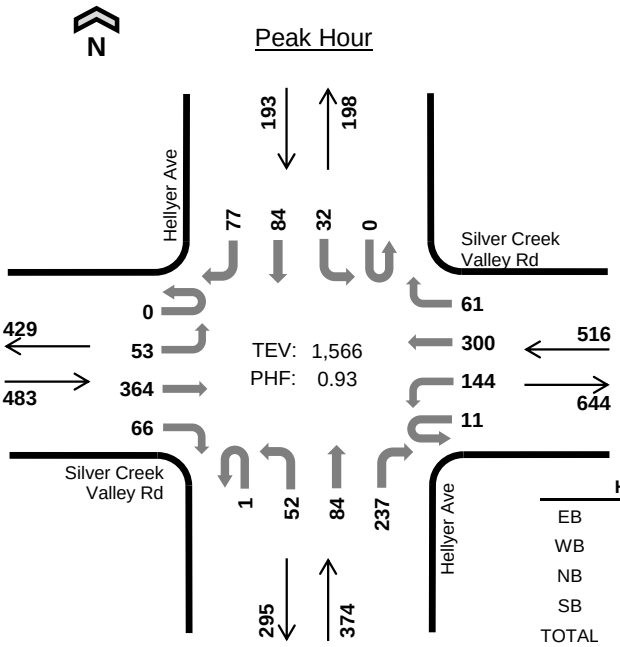
Two-Hour Count Summaries - Bikes

Interval Start	Silver Creek Valley Rd			Silver Creek Valley Rd			Hellyer Ave			Hellyer Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**

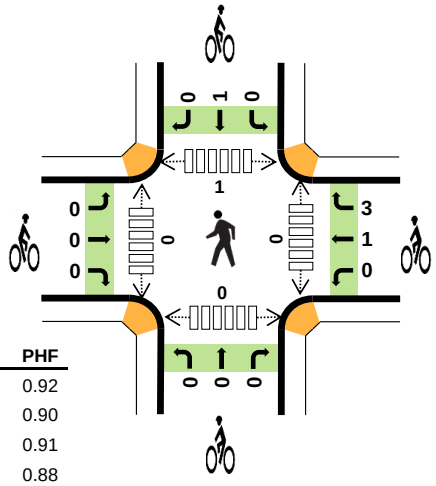
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Hellyer Ave
Silver Creek Valley Rd

Date: 01/19/2022
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	1.0%	0.92
WB	1.2%	0.90
NB	0.5%	0.91
SB	1.0%	0.88
TOTAL	1.0%	0.93



Two-Hour Count Summaries

Interval Start	Silver Creek Valley Rd Eastbound				Silver Creek Valley Rd Westbound				Hellyer Ave Northbound				Hellyer Ave Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	3	75	16	1	28	77	10	0	24	15	60	2	3	26	13	353	0
4:15 PM	0	17	92	12	0	45	70	9	1	7	17	38	0	3	12	7	330	0
4:30 PM	0	11	72	16	0	29	58	6	0	13	21	57	0	9	23	17	332	0
4:45 PM	**0**	**7**	**96**	**23**	**1**	**32**	**99**	**12**	**0**	**16**	**20**	**55**	**0**	**9**	**16**	**11**	**397**	1,412
5:00 PM	**0**	**10**	**88**	**13**	**5**	**42**	**64**	**10**	**0**	**18**	**21**	**64**	**0**	**9**	**27**	**19**	**390**	1,449
5:15 PM	**0**	**25**	**89**	**17**	**4**	**38**	**73**	**29**	**1**	**10**	**27**	**56**	**0**	**4**	**22**	**26**	**421**	1,540
5:30 PM	**0**	**11**	**91**	**13**	**1**	**32**	**64**	**10**	**0**	**8**	**16**	**62**	**0**	**10**	**19**	**21**	**358**	**1,566**
5:45 PM	0	19	85	6	1	32	58	7	0	7	11	75	1	19	18	21	360	1,529
Count Total	0	103	688	116	13	278	563	93	2	103	148	467	3	66	163	135	2,941	0
Peak Hour All	**0**	**53**	**364**	**66**	**11**	**144**	**300**	**61**	**1**	**52**	**84**	**237**	**0**	**32**	**84**	**77**	**1,566**	**0**
Peak Hour HV	**0**	**1**	**1**	**3**	**0**	**2**	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**15**	**0**
Peak Hour HV%	**-**	**2%**	**0%**	**5%**	**0%**	**1%**	**1%**	**0%**	**0%**	**0%**	**2%**	**0%**	**-**	**0%**	**2%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	3	4	*7*	0	0	1	1	*2*	0	2	0	0	*2*
4:15 PM	2	2	2	1	*7*	0	0	1	0	*1*	0	0	0	0	*0*
4:30 PM	3	1	1	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**0**	**2**	**0**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**2**	**0**	**1**	**0**	***3***	**0**	**4**	**0**	**0**	***4***	**0**	**0**	**1**	**0**	*1*
5:15 PM	**1**	**3**	**1**	**0**	***5***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**2**	**1**	**0**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:45 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	1	0	0	*1*
Count Total	10	10	8	7	*35*	0	4	2	2	*8*	0	3	1	0	*4*
Peak Hour	**5**	**6**	**2**	**2**	***15***	**0**	**4**	**0**	**1**	***5***	**0**	**0**	**1**	**0**	***1***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Silver Creek Valley Rd				Silver Creek Valley Rd				Hellyer Ave				Hellyer Ave				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	1	1	0	3	0	7	0
4:15 PM	0	0	2	0	0	0	2	0	0	0	1	1	0	0	1	0	7	0
4:30 PM	0	1	0	2	0	1	0	0	0	0	1	0	0	0	0	0	5	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	22
5:00 PM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	18
5:15 PM	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	16
5:30 PM	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**15**
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	13
Count Total	0	2	3	5	0	3	7	0	0	2	4	2	1	0	6	0	35	0
Peak Hour	**0**	**1**	**1**	**3**	**0**	**2**	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**15**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Silver Creek Valley Rd			Silver Creek Valley Rd			Hellyer Ave			Hellyer Ave			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	1	0	1	0	2	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:00 PM	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	5
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	5
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Count Total	0	0	0	0	1	3	0	1	1	0	2	0	8	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**0**

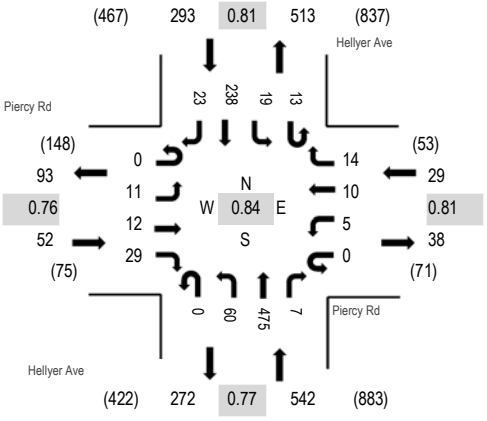
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

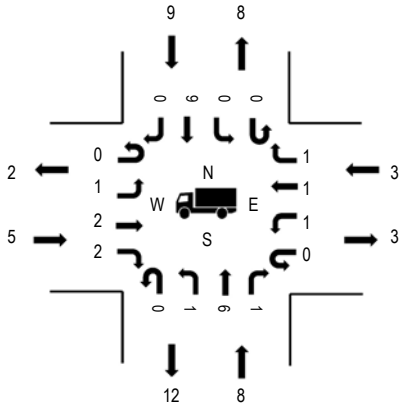
Location: 1 Hellyer Ave & Piercy Rd AM
Date: Tuesday, March 1, 2022
Study Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes in Study Peak Hour: 08:00 AM - 08:15 AM

Study Peak Hour (for all study intersections)

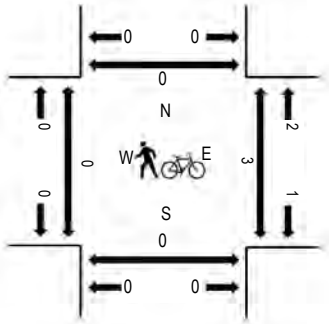
Motorized Vehicles



Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	9.6%	0.76
WB	10.3%	0.81
NB	1.5%	0.77
SB	3.1%	0.81
All	2.7%	0.84

Traffic Counts - Motorized Vehicles

Interval Start Time	Piercy Rd Eastbound				Piercy Rd Westbound				Hellyer Ave Northbound				Hellyer Ave Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
7:00 AM	0	0	4	0	0	0	3	3	0	6	51	0	2	5	28	0	102	659
7:15 AM	0	0	2	2	0	2	1	1	0	6	63	2	0	4	36	1	120	829
7:30 AM	0	3	3	1	0	2	1	7	0	8	104	0	2	4	36	5	176	912
7:45 AM	0	2	3	12	0	2	3	3	0	12	132	2	5	4	77	4	261	916
8:00 AM	0	1	3	9	0	0	6	3	0	22	153	2	0	4	64	5	272	819
8:15 AM	0	3	6	6	0	1	0	3	0	16	100	1	3	6	51	7	203	
8:30 AM	0	5	0	2	0	2	1	5	0	10	90	2	5	5	46	7	180	
8:45 AM	0	1	2	5	0	0	1	3	0	18	82	1	2	6	38	5	164	
Count Total	0	15	23	37	0	9	16	28	0	98	775	10	19	38	376	34	1,478	
Peak Hour	0	11	12	29	0	5	10	14	0	60	475	7	13	19	238	23	916	

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

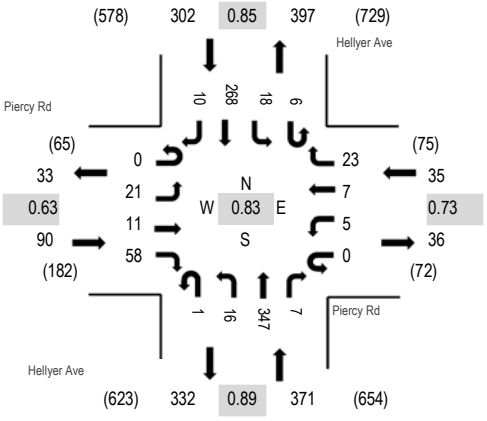
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	1	0	1	2	7:00 AM	0	1	0	0	1	7:00 AM	1	1	0	0	2
7:15 AM	0	2	1	1	4	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:30 AM	0	3	1	3	7	7:30 AM	0	1	0	0	1	7:30 AM	0	0	0	0	0
7:45 AM	2	0	0	3	5	7:45 AM	0	1	0	0	1	7:45 AM	0	0	3	0	3
8:00 AM	1	4	1	1	7	8:00 AM	0	0	0	0	0	8:00 AM	0	0	0	0	0
8:15 AM	0	3	1	2	6	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:30 AM	2	1	1	3	7	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:45 AM	0	4	0	3	7	8:45 AM	0	0	0	0	0	8:45 AM	1	0	0	0	1
Count Total	5	18	5	17	45	Count Total	0	3	0	0	3	Count Total	2	1	3	0	6
Peak Hour	5	8	3	9	25	Peak Hour	0	1	0	0	1	Peak Hour	0	0	3	0	3

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 Hellyer Ave & Piercy Rd PM
Date: Tuesday, March 1, 2022
Study Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes in Study Peak Hour: 05:00 PM - 05:15 PM

Study Peak Hour (for all study intersections)

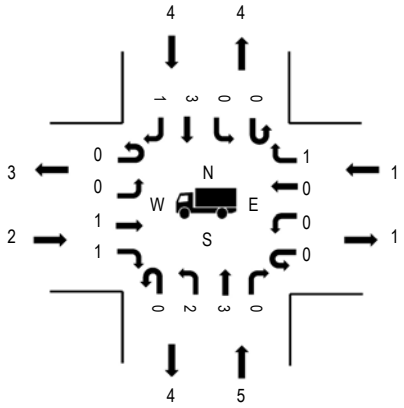
Motorized Vehicles



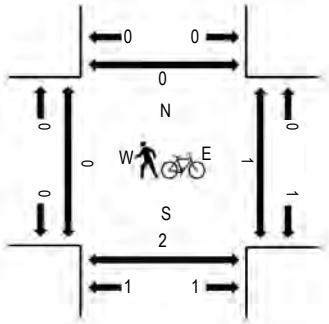
Note: Total study counts contained in parentheses.

	HV%	PHF
EB	2.2%	0.63
WB	2.9%	0.73
NB	1.3%	0.89
SB	1.3%	0.85
All	1.5%	0.83

Heavy Vehicles



Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	Piercy Rd Eastbound				Piercy Rd Westbound				Hellyer Ave Northbound				Hellyer Ave Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	7	3	16	0	1	1	8	1	3	73	3	6	7	56	2	187	691
4:15 PM	0	7	2	11	0	2	2	5	1	3	59	0	4	9	41	3	149	745
4:30 PM	0	6	4	16	0	3	3	6	0	4	77	0	1	3	68	3	194	797
4:45 PM	0	8	3	9	0	2	2	5	0	3	56	0	4	2	64	3	161	786
5:00 PM	0	11	3	22	0	3	2	7	0	4	100	0	2	4	80	3	241	798
5:15 PM	0	5	3	17	0	1	3	3	1	3	88	2	2	3	68	2	201	
5:30 PM	0	4	3	11	0	1	2	5	0	4	82	3	1	7	57	3	183	
5:45 PM	0	1	2	8	0	0	0	8	0	5	77	2	1	4	63	2	173	
Count Total	0	49	23	110	0	13	15	47	3	29	612	10	21	39	497	21	1,489	
Peak Hour	0	21	11	58	0	5	7	23	1	16	347	7	6	18	268	10	798	

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

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	2	2	0	3	7	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	1	1
4:15 PM	3	1	0	2	6	4:15 PM	0	1	0	1	2	4:15 PM	0	0	0	0	0
4:30 PM	1	1	1	1	4	4:30 PM	0	0	0	0	0	4:30 PM	0	0	1	0	1
4:45 PM	0	0	0	1	1	4:45 PM	0	0	0	1	1	4:45 PM	0	2	0	0	2
5:00 PM	2	2	0	1	5	5:00 PM	0	1	0	5	6	5:00 PM	0	1	0	0	1
5:15 PM	0	2	0	0	2	5:15 PM	0	2	0	0	2	5:15 PM	0	0	0	0	0
5:30 PM	0	1	1	2	4	5:30 PM	0	0	1	0	1	5:30 PM	0	0	1	0	1
5:45 PM	0	0	0	1	1	5:45 PM	0	0	0	0	0	5:45 PM	0	1	0	0	1
Count Total	8	9	2	11	30	Count Total	0	4	1	7	12	Count Total	0	4	2	1	7
Peak Hour	2	5	1	4	12	Peak Hour	0	3	1	5	9	Peak Hour	0	2	1	0	3

Appendices D – San Jose Approved Trip Inventory

AM PROJECT TRIPS

01/28/2022

Intersection of : Fontanoso Rd & Hellyer Av & Silver Creek Valley Rd & N Silver Cre

Traffix 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

01/28/2022

Intersection of : Fontanoso Rd & Hellyer Av & Silver Creek Valley Rd & N Silver Cre

Traffix 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 CISCO NORTH COYOTE VALLEY	0	0	0	0	0	0	0	69	0	0	269	0
TOTAL:	**55**	**51**	**23**	**4**	**140**	**63**	**192**	**145**	**159**	**98**	**587**	**19**

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

PM PROJECT TRIPS

01/28/2022

Intersection of : Fontanoso Rd & Hellyer Av & Silver Creek Valley Rd & N Silver Cre

Traffix 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

01/28/2022

Intersection of : Fontanoso Rd & Hellyer Av & Silver Creek Valley Rd & N Silver Cre

Traffix 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 CISCO NORTH COYOTE VALLEY	0	0	0	0	0	0	0	267	0	0	29	0
TOTAL:	**167**	**137**	**99**	**18**	**31**	**198**	**26**	**579**	**20**	**9**	**111**	**2**

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

AM PROJECT TRIPS

01/28/2022

Intersection of : Piercy Rd & Silver Creek Valley Rd

Traffix Node Number : 3855

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	0	0	0	0	-28	0	0	-109	0
EDENVALE1 Office/Industrial EAST OF 101, NORTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 1	0	0	0	0	0	0	0	347	0	0	90	0
EDENVALE2 Office/Industrial W/O 101, BOUNDED BY COTTLE RD, SANTA TERESA AND EDENVALE ZONE 2	0	0	0	0	0	0	0	4	0	0	18	0
EDENVALE3-4 Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 3&4	57	0	0	0	0	0	0	181	232	0	43	0
EDENVALE3-4POOL Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE AREA 3-4 POOL	6	0	0	0	0	0	0	22	28	0	4	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	0	0	12	0	0	0	0	8	3	0	37	0

AM PROJECT TRIPS

01/28/2022

Intersection of : Piercy Rd & Silver Creek Valley Rd

Traffix Node Number : 3855

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
NORTH COYOTE Office/Industrial NORTH COYOTE VALLEY NORTH COYOTE VALLEY CAMPUS INDUSTRIAL	0	0	0	0	0	0	0	60	0	0	241	0
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 CISCO NORTH COYOTE VALLEY	0	0	0	0	0	0	0	69	0	0	369	0
TOTAL:	**63**	**0**	**12**	**0**	**0**	**0**	**0**	**670**	**263**	**0**	**722**	**0**

	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	0	722	0
SOUTH	63	0	12
WEST	0	670	263

PM PROJECT TRIPS

01/28/2022

Intersection of : Piercy Rd & Silver Creek Valley Rd

Traffix Node Number : 3855

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	0	0	0	0	-109	0	0	-11	0
EDENVALE1 Office/Industrial EAST OF 101, NORTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 1	0	0	0	0	0	0	0	37	0	0	365	0
EDENVALE2 Office/Industrial W/O 101, BOUNDED BY COTTLE RD, SANTA TERESA AND EDENVALE ZONE 2	0	0	0	0	0	0	0	18	0	0	1	0
EDENVALE3-4 Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 3&4	232	0	0	0	0	0	0	19	24	0	177	0
EDENVALE3-4POOL Office/Industrial EAST OF 101, SOUTH OF SILVER CREEK VALLEY RD EDENVALE AREA 3-4 POOL	28	0	0	0	0	0	0	3	3	0	22	0
EEHDP (RES) Residential EVERGREEN EEHDP (RESIDENTIAL)	0	0	0	0	0	0	0	2	0	0	2	0
HITACHI CREDIT (3-14641) Office/Industrial 5600 COTTLE RD HITACHI CREDIT	0	0	13	0	0	0	0	27	9	0	10	0

PM PROJECT TRIPS

01/28/2022

Intersection of : Piercy Rd & Silver Creek Valley Rd

Traffix Node Number : 3855

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
NORTH COYOTE Office/Industrial NORTH COYOTE VALLEY NORTH COYOTE VALLEY CAMPUS INDUSTRIAL	0	0	0	0	0	0	0	241	0	0	60	0
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 CISCO NORTH COYOTE VALLEY	0	0	0	0	0	0	0	267	0	0	29	0
TOTAL:	**260**	**0**	**13**	**0**	**0**	**0**	**0**	**533**	**36**	**0**	**658**	**0**

	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	0	658	0
SOUTH	260	0	13
WEST	0	533	36

AM PROJECT TRIPS

01/28/2022

Intersection of : Hellyer Av & Piercy Rd

Traffix 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
TOTAL:	**110**	**124**	**0**	**0**	**232**	**85**	**19**	**48**	**40**	**0**	**12**	**0**

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

PM PROJECT TRIPS

01/28/2022

Intersection of : Hellyer Av & Piercy Rd

Traffix Node Number : 3949

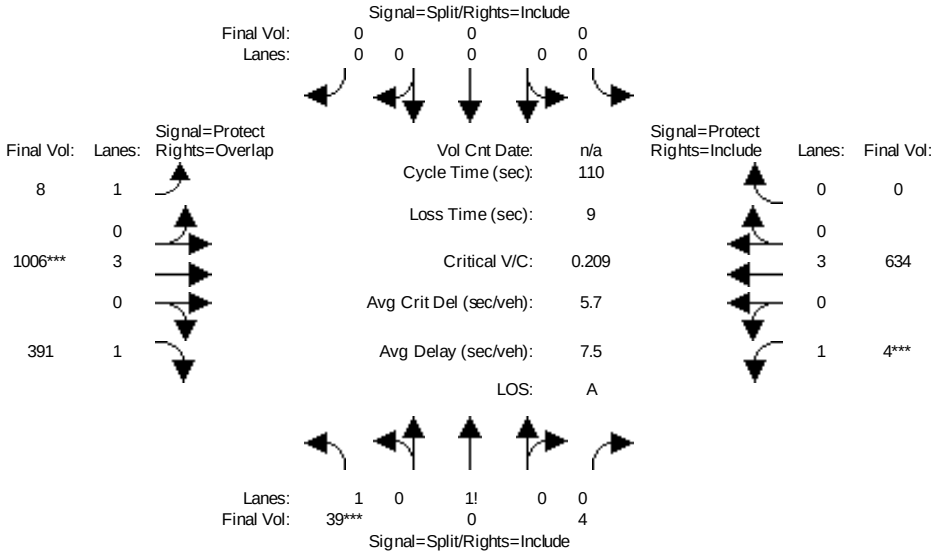
Permit No./Proposed Land Use/Description/Location	M09 NBL	M08 NBT	M07 NBR	M03 SBL	M02 SBT	M01 SBR	M12 EBL	M11 EBT	M10 EBR	M06 WBL	M05 WBT	M04 WBR
EDENVALE1 Office/Industrial EAST OF 101, NORTH OF SILVER CREEK VALLEY RD EDENVALE ZONE 1	0	2	0	0	22	0	0	0	0	0	0	0
EDENVALE2 Office/Industrial W/O 101, BOUNDED 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
TOTAL:	**27**	**217**	**0**	**0**	**27**	**0**	**0**	**0**	**110**	**0**	**48**	**0**

	LEFT	THRU	RIGHT
NORTH	0	27	0
EAST	0	48	0
SOUTH	27	217	0
WEST	0	0	110

Appendices E – TRAFFIX Intersection Operations Analysis

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
EX_AM

Intersection #1: Silver Creek Valley / Piercy

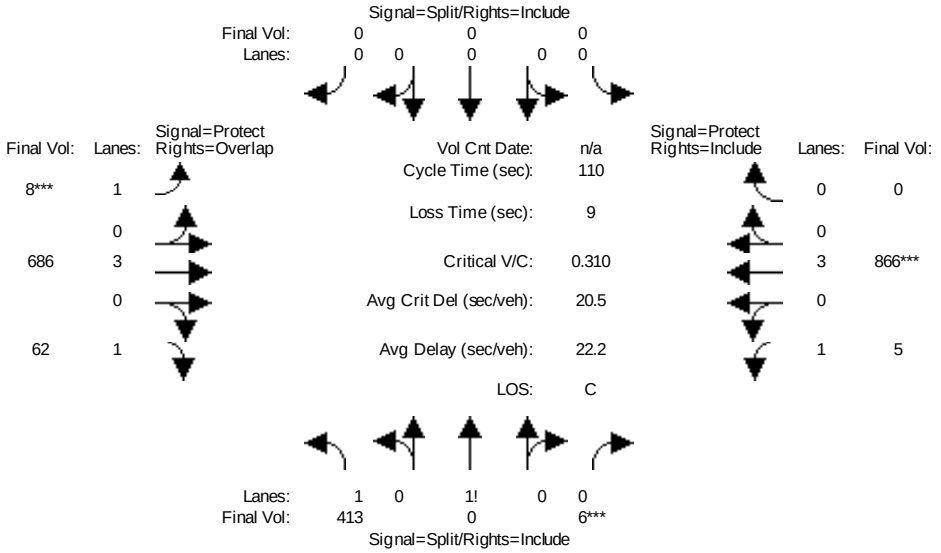


Street Name:	Piercy Road						Siilver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	39	0	4	0	0	0	8	1006	391	4	634	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:	39	0	4	0	0	0	8	1006	391	4	634	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:	39	0	4	0	0	0	8	1006	391	4	634	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	0	4	0	0	0	8	1006	391	4	634	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:	39	0	4	0	0	0	8	1006	391	4	634	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.92	1.00	0.92	0.88	1.00	0.78	0.88	1.00	0.92
Lanes:	1.83	0.00	0.17	0.00	0.00	0.00	1.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3022	0	281	0	0	0	1663	5700	1488	1663	5700	0
Capacity Analysis Module:												
Vol/Sat:	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.18	0.26	0.00	0.11	0.00
Crit Moves:	****							****		****		
Green/Cycle:	0.09	0.00	0.09	0.00	0.00	0.00	0.30	0.76	0.85	0.06	0.53	0.00
Volume/Cap:	0.14	0.00	0.16	0.00	0.00	0.00	0.02	0.23	0.31	0.04	0.21	0.00
Uniform Del:	46.0	0.0	46.1	0.0	0.0	0.0	27.0	3.7	1.6	48.3	13.9	0.0
IncremntDel:	0.2	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	46.3	0.0	46.4	0.0	0.0	0.0	27.0	3.8	1.7	48.5	13.9	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:	46.3	0.0	46.4	0.0	0.0	0.0	27.0	3.8	1.7	48.5	13.9	0.0
LOS by Move:	D	A	D	A	A	A	C	A	A	D	B	A
HCM2k95thQ:	2	0	2	0	0	0	0	6	6	0	7	0

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
EX_PM

Intersection #1: Silver Creek Valley / Piercy

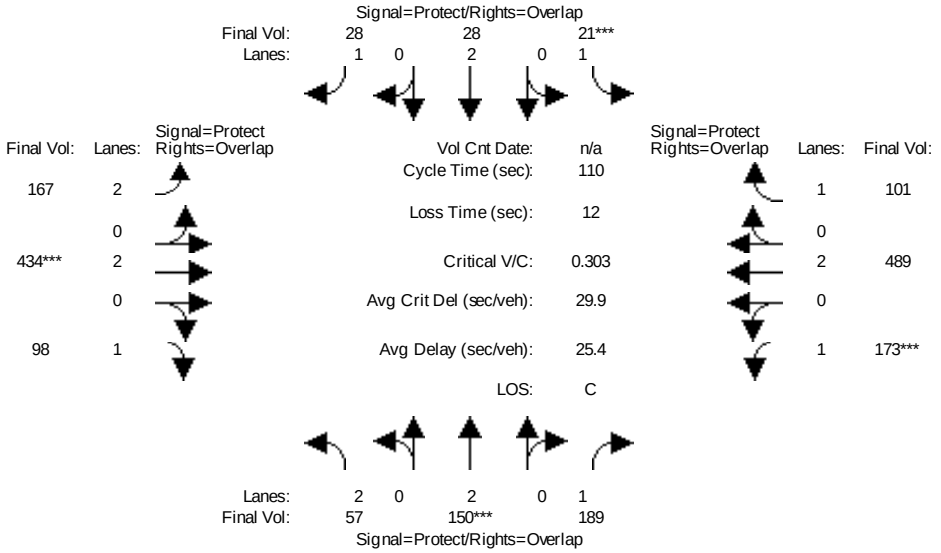


Street Name:	Piercy Road						Siilver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	413	0	6	0	0	0	8	686	62	5	866	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:	413	0	6	0	0	0	8	686	62	5	866	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:	413	0	6	0	0	0	8	686	62	5	866	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	413	0	6	0	0	0	8	686	62	5	866	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:	413	0	6	0	0	0	8	686	62	5	866	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	0.92	1.00	0.92	0.88	1.00	0.78	0.88	1.00	0.92
Lanes:	1.97	0.00	0.03	0.00	0.00	0.00	1.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3282	0	47	0	0	0	1663	5700	1488	1663	5700	0
Capacity Analysis Module:												
Vol/Sat:	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.12	0.04	0.00	0.15	0.00
Crit Moves:			****				****				****	
Green/Cycle:	0.39	0.00	0.39	0.00	0.00	0.00	0.06	0.35	0.74	0.18	0.46	0.00
Volume/Cap:	0.32	0.00	0.33	0.00	0.00	0.00	0.08	0.35	0.06	0.02	0.33	0.00
Uniform Del:	23.4	0.0	23.4	0.0	0.0	0.0	48.5	26.8	4.0	36.9	18.6	0.0
IncremntDel:	0.1	0.0	0.2	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	23.5	0.0	23.6	0.0	0.0	0.0	48.8	26.9	4.0	36.9	18.7	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:	23.5	0.0	23.6	0.0	0.0	0.0	48.8	26.9	4.0	36.9	18.7	0.0
LOS by Move:	C	A	C	A	A	A	D	C	A	D	B	A
HCM2k95thQ:	10	0	11	0	0	0	1	11	1	0	11	0

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
EX_AM

Intersection #2: SIlver Creek Valley / Hellyer

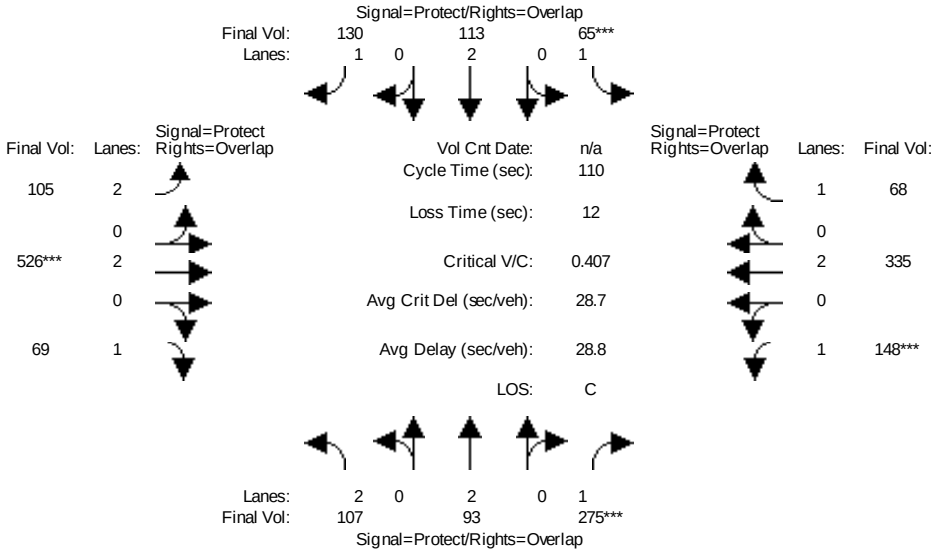


Street Name:	Hellyer Road						Silver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	57	150	189	21	28	28	167	434	98	173	489	101
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:	57	150	189	21	28	28	167	434	98	173	489	101
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:	57	150	189	21	28	28	167	434	98	173	489	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	150	189	21	28	28	167	434	98	173	489	101
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:	57	150	189	21	28	28	167	434	98	173	489	101
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.79	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	1.00	0.78
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.:	2992	3800	1488	1663	3800	1488	2992	3800	1488	1663	3800	1488
Capacity Analysis Module:												
Vol/Sat:	0.02	0.04	0.13	0.01	0.01	0.02	0.06	0.11	0.07	0.10	0.13	0.07
Crit Moves:		****		****				****		****		
Green/Cycle:	0.08	0.13	0.46	0.06	0.11	0.34	0.23	0.37	0.44	0.33	0.47	0.53
Volume/Cap:	0.24	0.31	0.28	0.20	0.07	0.05	0.24	0.31	0.15	0.31	0.27	0.13
Uniform Del:	47.6	43.7	18.3	48.8	43.7	24.1	34.4	24.9	18.1	27.2	17.8	12.9
IncremntDel:	0.5	0.4	0.2	0.9	0.1	0.0	0.2	0.1	0.1	0.3	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	48.2	44.0	18.5	49.8	43.8	24.2	34.6	25.0	18.2	27.6	17.9	13.0
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:	48.2	44.0	18.5	49.8	43.8	24.2	34.6	25.0	18.2	27.6	17.9	13.0
LOS by Move:	D	D	B	D	D	C	C	C	B	C	B	B
HCM2k95thQ:	2	5	8	2	1	1	5	10	4	9	10	4

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
EX_PM

Intersection #2: SIlver Creek Valley / Hellyer

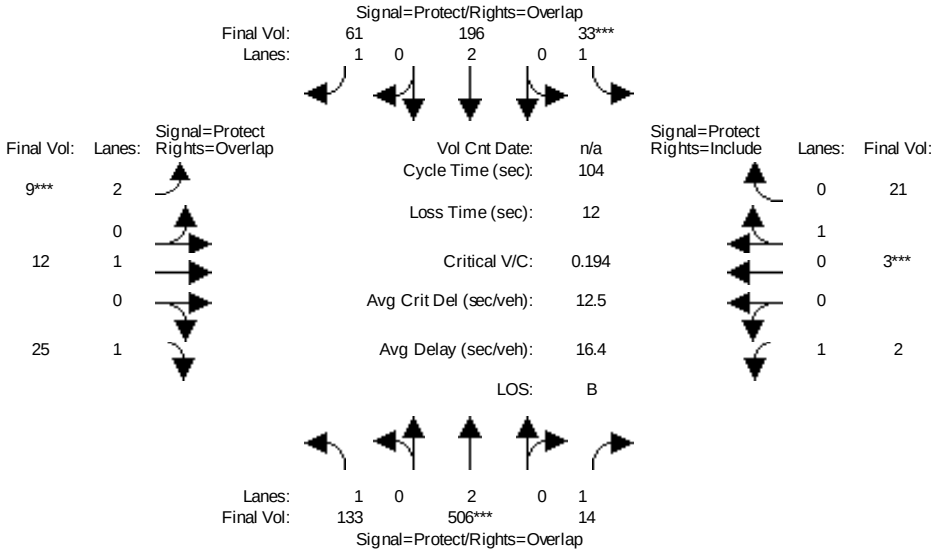


Street Name:	Hellyer Road						Silver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	107	93	275	65	113	130	105	526	69	148	335	68
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	107	93	275	65	113	130	105	526	69	148	335	68
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	107	93	275	65	113	130	105	526	69	148	335	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	107	93	275	65	113	130	105	526	69	148	335	68
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:	107	93	275	65	113	130	105	526	69	148	335	68
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.79	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	1.00	0.78
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.:	2992	3800	1488	1663	3800	1488	2992	3800	1488	1663	3800	1488
Capacity Analysis Module:												
Vol/Sat:	0.04	0.02	0.18	0.04	0.03	0.09	0.04	0.14	0.05	0.09	0.09	0.05
Crit Moves:			****	****				****		****		
Green/Cycle:	0.14	0.24	0.45	0.10	0.20	0.43	0.23	0.34	0.48	0.22	0.33	0.43
Volume/Cap:	0.26	0.10	0.41	0.41	0.15	0.21	0.15	0.41	0.10	0.41	0.27	0.11
Uniform Del:	42.5	32.9	20.1	46.8	36.7	19.9	33.8	27.8	15.8	36.8	27.2	19.1
IncremntDel:	0.3	0.1	0.4	1.7	0.1	0.2	0.1	0.2	0.1	0.7	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	42.9	33.0	20.5	48.5	36.8	20.1	33.9	28.0	15.8	37.6	27.3	19.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.9	33.0	20.5	48.5	36.8	20.1	33.9	28.0	15.8	37.6	27.3	19.1
LOS by Move:	D	C	C	D	D	C	C	C	B	D	C	B
HCM2k95thQ:	4	2	13	5	3	6	3	13	3	10	8	3

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
EX_AM

Intersection #3: Hellyer / Piercy

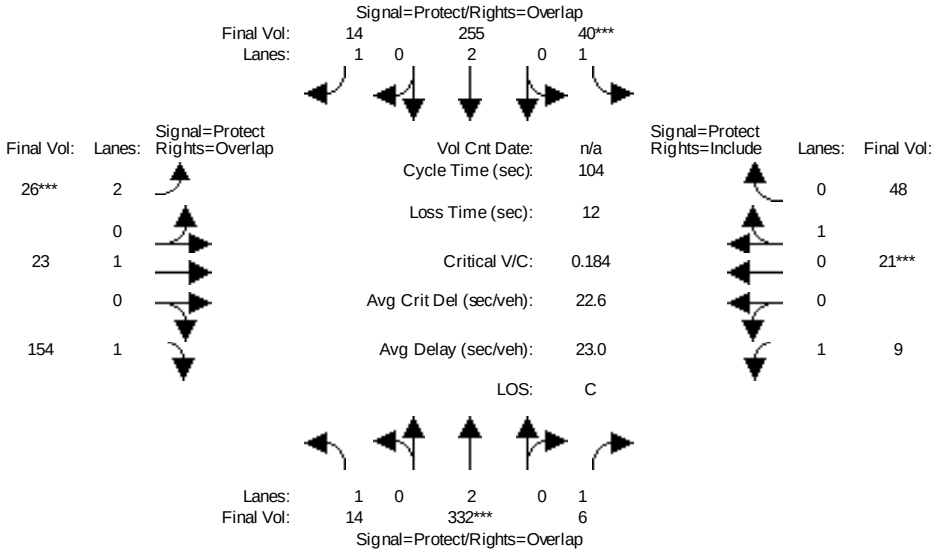


Street Name:	Hellyer Avenue						Piercy Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	133	506	14	33	196	61	9	12	25	2	3	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:	133	506	14	33	196	61	9	12	25	2	3	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:	133	506	14	33	196	61	9	12	25	2	3	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	133	506	14	33	196	61	9	12	25	2	3	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:	133	506	14	33	196	61	9	12	25	2	3	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	0.87	0.80
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	0.12	0.88
Final Sat.:	1663	3800	1488	1663	3800	1488	2992	1900	1488	1663	192	1344
Capacity Analysis Module:												
Vol/Sat:	0.08	0.13	0.01	0.02	0.05	0.04	0.00	0.01	0.02	0.00	0.02	0.02
Crit Moves:		****			****			****			****	
Green/Cycle:	0.33	0.63	0.69	0.09	0.39	0.46	0.07	0.10	0.42	0.07	0.10	0.10
Volume/Cap:	0.24	0.21	0.01	0.21	0.13	0.09	0.04	0.07	0.04	0.02	0.16	0.16
Uniform Del:	25.6	8.3	4.9	43.6	20.2	15.8	45.4	42.8	17.6	45.3	43.2	43.2
IncremntDel:	0.2	0.0	0.0	0.7	0.0	0.1	0.1	0.2	0.0	0.1	0.5	0.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	25.8	8.4	4.9	44.3	20.2	15.8	45.5	42.9	17.6	45.4	43.7	43.7
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:	25.8	8.4	4.9	44.3	20.2	15.8	45.5	42.9	17.6	45.4	43.7	43.7
LOS by Move:	C	A	A	D	C	B	D	D	B	D	D	D
HCM2k95thQ:	7	7	0	3	4	2	0	1	1	0	2	2

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
EX_PM

Intersection #3: Hellyer / Piercy

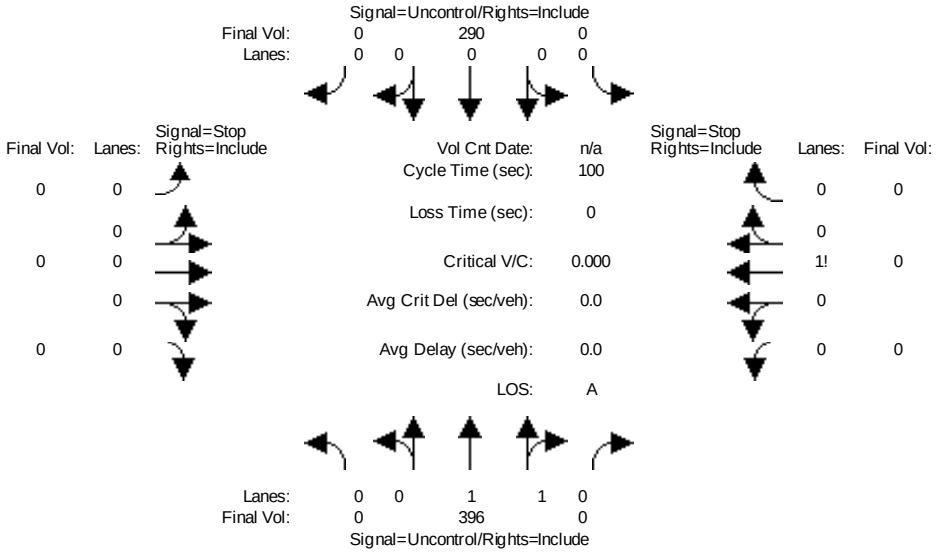


Street Name:	Hellyer Avenue						Piercy Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	14	332	6	40	255	14	26	23	154	9	21	48
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	332	6	40	255	14	26	23	154	9	21	48
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	332	6	40	255	14	26	23	154	9	21	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	14	332	6	40	255	14	26	23	154	9	21	48
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	332	6	40	255	14	26	23	154	9	21	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	0.90	0.83
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	0.29	0.71
Final Sat.:	1663	3800	1488	1663	3800	1488	2992	1900	1488	1663	489	1118
Capacity Analysis Module:												
Vol/Sat:	0.01	0.09	0.00	0.02	0.07	0.01	0.01	0.01	0.10	0.01	0.04	0.04
Crit Moves:		****			****			****			****	
Green/Cycle:	0.24	0.46	0.58	0.13	0.35	0.41	0.07	0.17	0.42	0.12	0.23	0.23
Volume/Cap:	0.03	0.19	0.01	0.19	0.19	0.02	0.13	0.07	0.25	0.04	0.19	0.19
Uniform Del:	30.1	16.5	9.0	40.6	23.8	18.0	45.6	36.0	19.8	40.4	32.4	32.4
IncremntDel:	0.0	0.1	0.0	0.4	0.1	0.0	0.3	0.1	0.2	0.1	0.3	0.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	30.1	16.5	9.0	41.0	23.8	18.0	45.9	36.1	20.0	40.5	32.7	32.7
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:	30.1	16.5	9.0	41.0	23.8	18.0	45.9	36.1	20.0	40.5	32.7	32.7
LOS by Move:	C	B	A	D	C	B	D	D	B	D	C	C
HCM2k95thQ:	1	6	0	3	6	1	1	1	7	1	4	4

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

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
EX_AM

Intersection #4: Hellyer / Project 1



Street Name:	Helllyer Avenue						Project Driveway 1					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	396	0	0	290	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	396	0	0	290	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	396	0	0	290	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	396	0	0	290	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	686	686	198
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	416	373	848
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	416	373	848
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.00
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 Hellyer / Project 1

****

Base Volume Alternative: Peak Hour Warrant NOT Met

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

Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign							
Lanes:	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1!	0	0			
Initial Vol:	0	396		0		0	290		0		0		0		0		0		0				
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx							

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #4 Hellyer / Project 1

****

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound							
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R			
Control:	Uncontrolled					Uncontrolled					Stop Sign					Stop Sign							
Lanes:	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1!	0	0			
Initial Vol:	0	396		0		0	290		0		0		0		0		0		0				

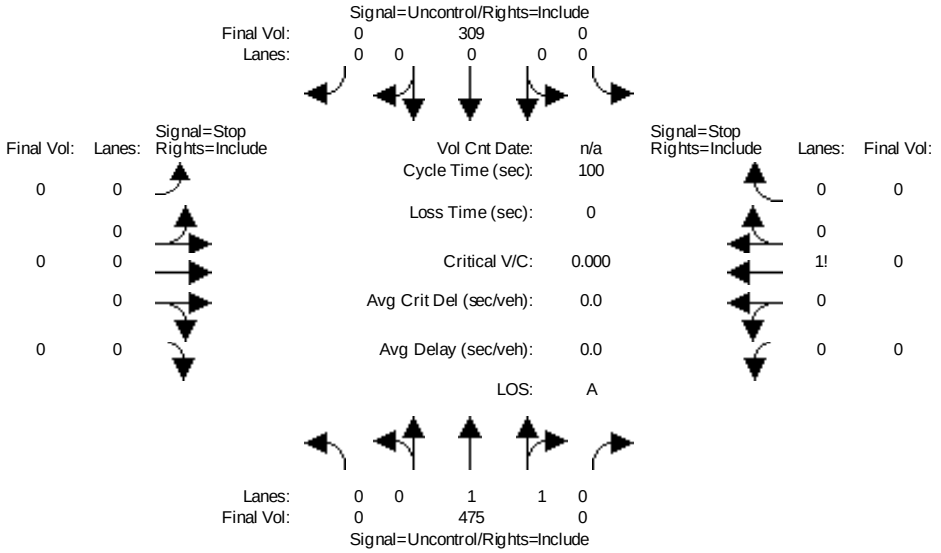
Major Street Volume:	686
Minor Approach Volume:	0
Minor Approach Volume Threshold:	415

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
EX_PM

Intersection #4: Hellyer / Project 1



Street Name:	Helllyer Avenue						Project Driveway 1					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	475	0	0	309	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	475	0	0	309	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	475	0	0	309	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	475	0	0	309	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	784	784	238
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	365	327	806
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	365	327	806
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.00
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 Hellyer / Project 1

****

Base Volume Alternative: Peak Hour Warrant NOT Met

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

Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 0 1	1 0		0 0 1	0 0		0 0 0	0 0		0 0 1!	0 0	
Initial Vol:	0	475	0	0	309	0	0	0	0	0	0	0
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #4 Hellyer / Project 1

****

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Lanes:	0 0 1	1 0		0 0 1	0 0		0 0 0	0 0		0 0 1!	0 0	
Initial Vol:	0	475	0	0	309	0	0	0	0	0	0	0

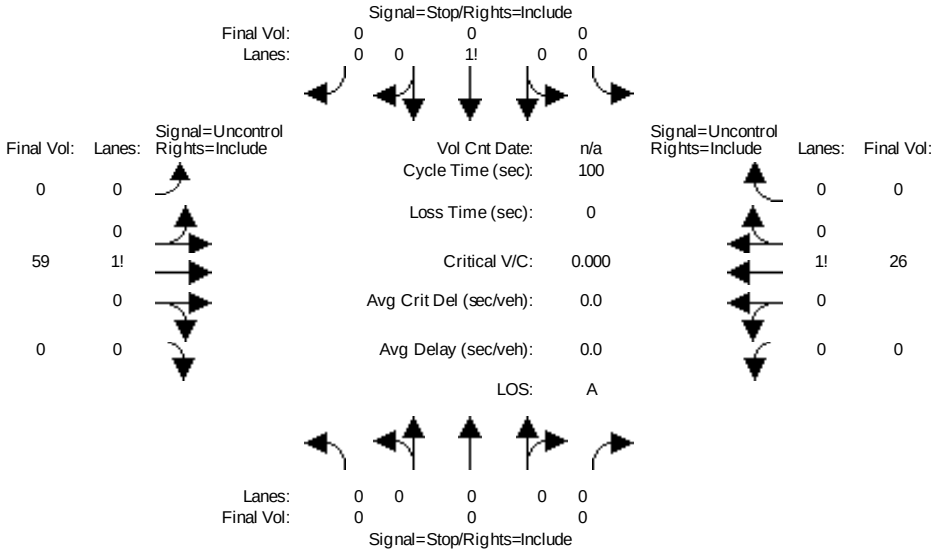
Major Street Volume: 784
Minor Approach Volume: 0
Minor Approach Volume Threshold: 369

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
EX_AM

Intersection #5: Piercy / Project 2




```
Street Name:         Project Driveway 2                  Piercy Road
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0    0     0     0   59     0     0   26     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     0    0     0     0   59     0     0   26     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     0    0     0     0   59     0     0   26     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0     0    0     0     0   59     0     0   26     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx    85   85    26  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   921  809  1056  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   921  809  1056  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.00 0.00  0.00  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx    0 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:         *                *                *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #5 Piercy / Project 2
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
```

```
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  0  1  0  0    0  0  1  0  0
Initial Vol:    0    0     0     0    0     0     0   59     0     0   26     0
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
               Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Piercy / Project 2
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  1! 0  0    0  0  1  0  0    0  0  1  0  0
Initial Vol:    0    0     0     0    0     0     0   59     0     0   26     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             85
Minor Approach Volume:           0
Minor Approach Volume Threshold: 877
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
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"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```
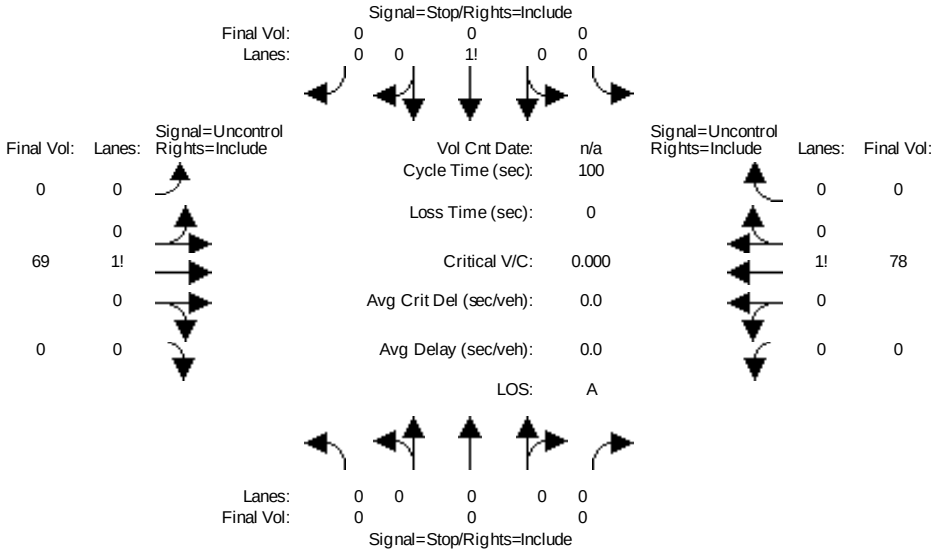

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
EX_PM

Intersection #5: Piercy / Project 2




```
Street Name:         Project Driveway 2                  Piercy Road
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0    0     0     0   69     0     0   78     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     0    0     0     0   69     0     0   78     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     0    0     0     0   69     0     0   78     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0     0    0     0     0   69     0     0   78     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   147  147    78  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   850  748   988  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   850  748   988  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.00 0.00  0.00  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx    0 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:         *                *                *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #5 Piercy / Project 2
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
```

Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 1! 0 0	0 0 1 0 0	0 0 1 0 0
Initial Vol:	0 0 0	0 0 0	0 69 0	0 78 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER
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Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #5 Piercy / Project 2

****

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 1! 0 0	0 0 1 0 0	0 0 1 0 0
Initial Vol:	0 0 0	0 0 0	0 69 0	0 78 0

Major Street Volume:	147
Minor Approach Volume:	0
Minor Approach Volume Threshold:	731

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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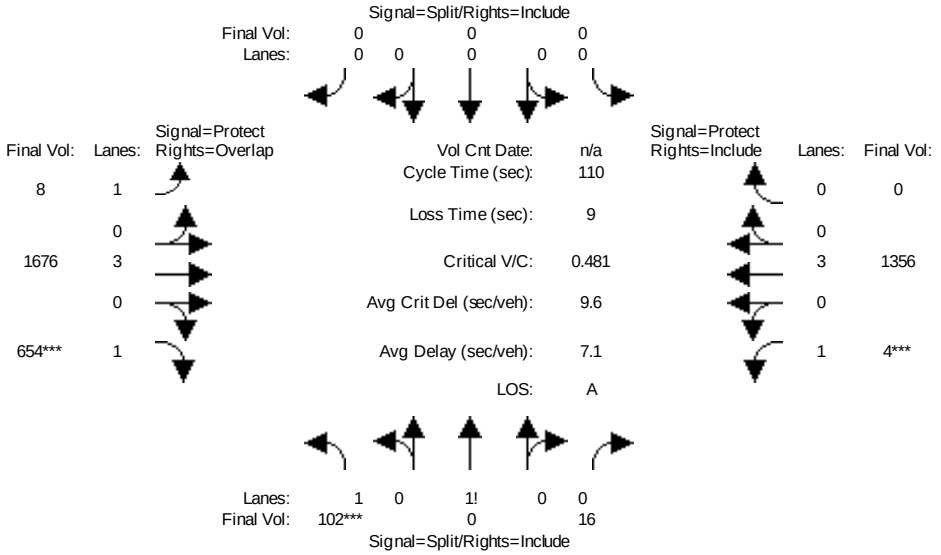
Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
BG_AM

Intersection #1: Silver Creek Valley / Piercy

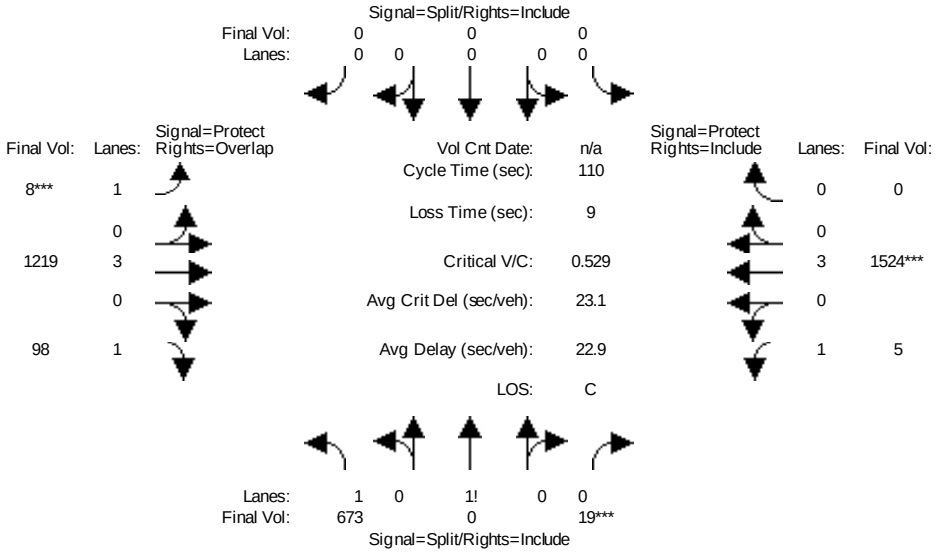


Street Name:	Piercy Road						Siilver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	102	0	16	0	0	0	8	1676	654	4	1356	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:	102	0	16	0	0	0	8	1676	654	4	1356	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:	102	0	16	0	0	0	8	1676	654	4	1356	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	102	0	16	0	0	0	8	1676	654	4	1356	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:	102	0	16	0	0	0	8	1676	654	4	1356	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	1.00	0.87	0.92	1.00	0.92	0.88	1.00	0.78	0.88	1.00	0.92
Lanes:	1.76	0.00	0.24	0.00	0.00	0.00	1.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	2897	0	393	0	0	0	1663	5700	1488	1663	5700	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.29	0.44	0.00	0.24	0.00
Crit Moves:	****								****	****		
Green/Cycle:	0.09	0.00	0.09	0.00	0.00	0.00	0.17	0.76	0.85	0.06	0.65	0.00
Volume/Cap:	0.39	0.00	0.45	0.00	0.00	0.00	0.03	0.39	0.51	0.04	0.36	0.00
Uniform Del:	47.1	0.0	47.4	0.0	0.0	0.0	37.7	4.4	2.1	48.3	8.7	0.0
IncremntDel:	0.8	0.0	1.2	0.0	0.0	0.0	0.0	0.1	0.4	0.1	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	47.9	0.0	48.6	0.0	0.0	0.0	37.7	4.4	2.4	48.5	8.8	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:	47.9	0.0	48.6	0.0	0.0	0.0	37.7	4.4	2.4	48.5	8.8	0.0
LOS by Move:	D	A	D	A	A	A	D	A	A	D	A	A
HCM2k95thQ:	5	0	6	0	0	0	0	12	13	0	13	0

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
BG_PM

Intersection #1: Silver Creek Valley / Piercy

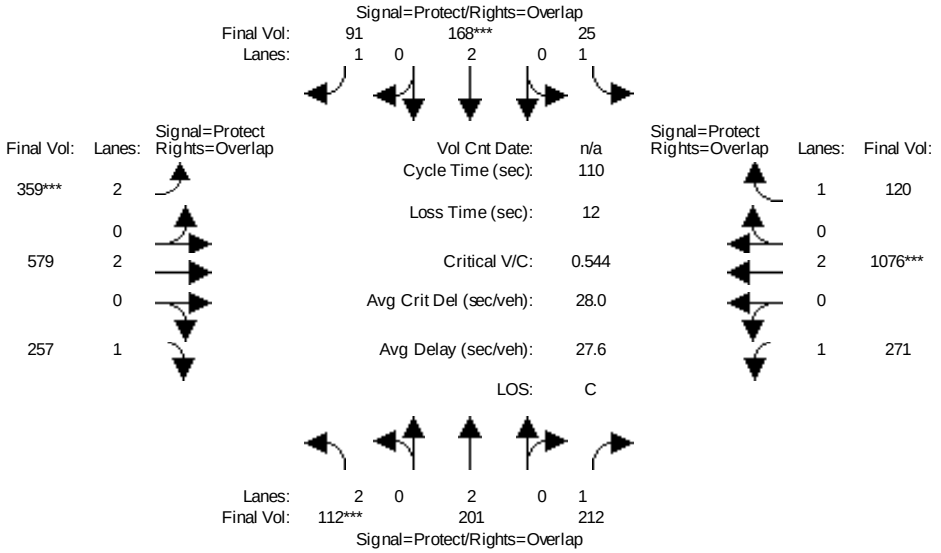


Street Name:	Piercy Road						Siilver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	673	0	19	0	0	0	8	1219	98	5	1524	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:	673	0	19	0	0	0	8	1219	98	5	1524	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:	673	0	19	0	0	0	8	1219	98	5	1524	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	673	0	19	0	0	0	8	1219	98	5	1524	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:	673	0	19	0	0	0	8	1219	98	5	1524	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	0.92	1.00	0.92	0.88	1.00	0.78	0.88	1.00	0.92
Lanes:	1.95	0.00	0.05	0.00	0.00	0.00	1.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3237	0	89	0	0	0	1663	5700	1488	1663	5700	0
Capacity Analysis Module:												
Vol/Sat:	0.21	0.00	0.21	0.00	0.00	0.00	0.00	0.21	0.07	0.00	0.27	0.00
Crit Moves:			****				****				****	
Green/Cycle:	0.38	0.00	0.38	0.00	0.00	0.00	0.06	0.41	0.79	0.12	0.47	0.00
Volume/Cap:	0.55	0.00	0.56	0.00	0.00	0.00	0.08	0.52	0.08	0.02	0.56	0.00
Uniform Del:	26.7	0.0	26.9	0.0	0.0	0.0	48.5	23.9	2.5	42.4	20.7	0.0
IncremntDel:	0.5	0.0	0.6	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.3	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	27.2	0.0	27.5	0.0	0.0	0.0	48.8	24.1	2.5	42.4	21.0	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:	27.2	0.0	27.5	0.0	0.0	0.0	48.8	24.1	2.5	42.4	21.0	0.0
LOS by Move:	C	A	C	A	A	A	D	C	A	D	C	A
HCM2k95thQ:	19	0	19	0	0	0	1	18	2	0	22	0

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
BG_AM

Intersection #2: SIlver Creek Valley / Hellyer

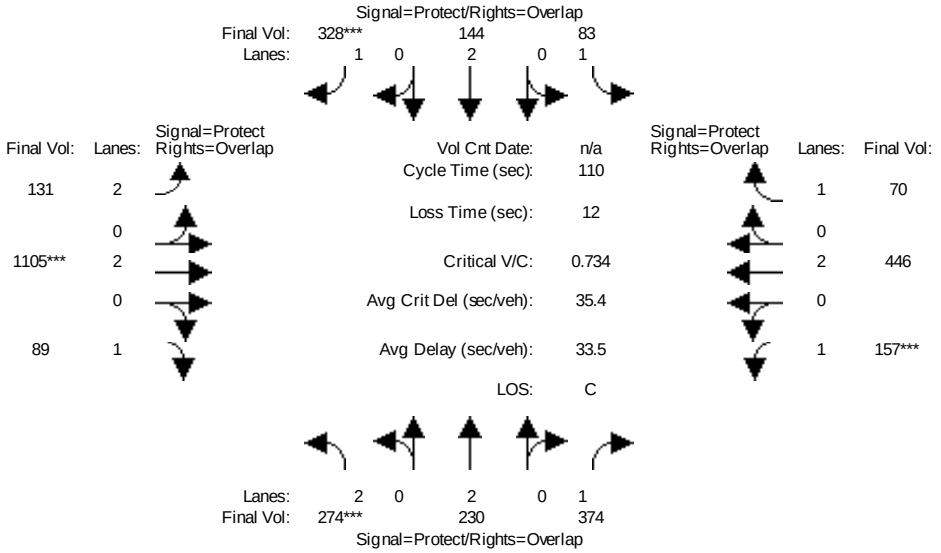


Street Name:	Hellyer Road						Silver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	112	201	212	25	168	91	359	579	257	271	1076	120
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:	112	201	212	25	168	91	359	579	257	271	1076	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	112	201	212	25	168	91	359	579	257	271	1076	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	112	201	212	25	168	91	359	579	257	271	1076	120
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:	112	201	212	25	168	91	359	579	257	271	1076	120
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.79	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	1.00	0.78
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.:	2992	3800	1488	1663	3800	1488	2992	3800	1488	1663	3800	1488
Capacity Analysis Module:												
Vol/Sat:	0.04	0.05	0.14	0.02	0.04	0.06	0.12	0.15	0.17	0.16	0.28	0.08
Crit Moves:	****				****		****				****	
Green/Cycle:	0.07	0.09	0.47	0.07	0.09	0.31	0.22	0.35	0.42	0.38	0.51	0.58
Volume/Cap:	0.55	0.57	0.30	0.23	0.49	0.20	0.55	0.43	0.41	0.43	0.55	0.14
Uniform Del:	49.6	47.7	17.9	48.8	47.6	28.0	38.2	27.1	22.2	25.4	18.1	10.6
IncremntDel:	3.2	2.1	0.2	1.1	1.1	0.2	1.0	0.2	0.4	0.5	0.3	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	52.9	49.9	18.1	49.9	48.6	28.2	39.2	27.3	22.7	25.9	18.4	10.6
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:	52.9	49.9	18.1	49.9	48.6	28.2	39.2	27.3	22.7	25.9	18.4	10.6
LOS by Move:	D	D	B	D	D	C	D	C	C	C	B	B
HCM2k95thQ:	5	7	9	2	7	5	12	14	12	14	22	4

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
BG_PM

Intersection #2: SIlver Creek Valley / Hellyer

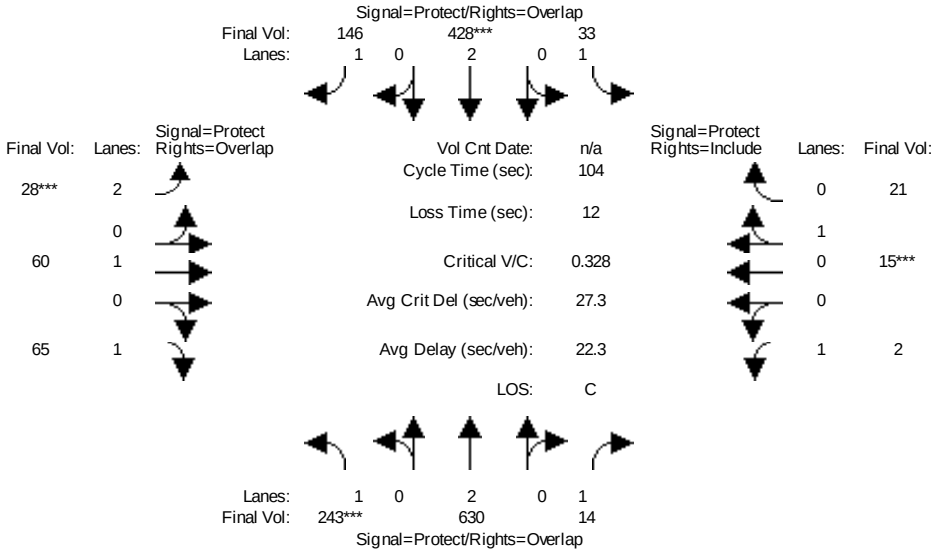


Street Name:	Hellyer Road						Silver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	274	230	374	83	144	328	131	1105	89	157	446	70
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:	274	230	374	83	144	328	131	1105	89	157	446	70
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:	274	230	374	83	144	328	131	1105	89	157	446	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	274	230	374	83	144	328	131	1105	89	157	446	70
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:	274	230	374	83	144	328	131	1105	89	157	446	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.79	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	1.00	0.78
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.:	2992	3800	1488	1663	3800	1488	2992	3800	1488	1663	3800	1488
Capacity Analysis Module:												
Vol/Sat:	0.09	0.06	0.25	0.05	0.04	0.22	0.04	0.29	0.06	0.09	0.12	0.05
Crit Moves:	****					****		****		****		
Green/Cycle:	0.12	0.24	0.37	0.10	0.21	0.40	0.18	0.40	0.52	0.13	0.34	0.44
Volume/Cap:	0.73	0.25	0.68	0.51	0.18	0.55	0.24	0.73	0.11	0.73	0.34	0.11
Uniform Del:	46.4	33.7	29.2	47.1	35.3	25.5	38.2	28.3	13.4	46.1	27.1	18.2
IncremntDel:	7.3	0.1	3.5	2.7	0.1	1.1	0.2	1.9	0.1	12.3	0.2	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	53.7	33.9	32.6	49.9	35.4	26.7	38.5	30.2	13.5	58.4	27.3	18.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.7	33.9	32.6	49.9	35.4	26.7	38.5	30.2	13.5	58.4	27.3	18.3
LOS by Move:	D	C	C	D	D	C	D	C	B	E	C	B
HCM2k95thQ:	11	6	21	7	4	18	4	28	3	14	11	3

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
BG_AM

Intersection #3: Hellyer / Piercy

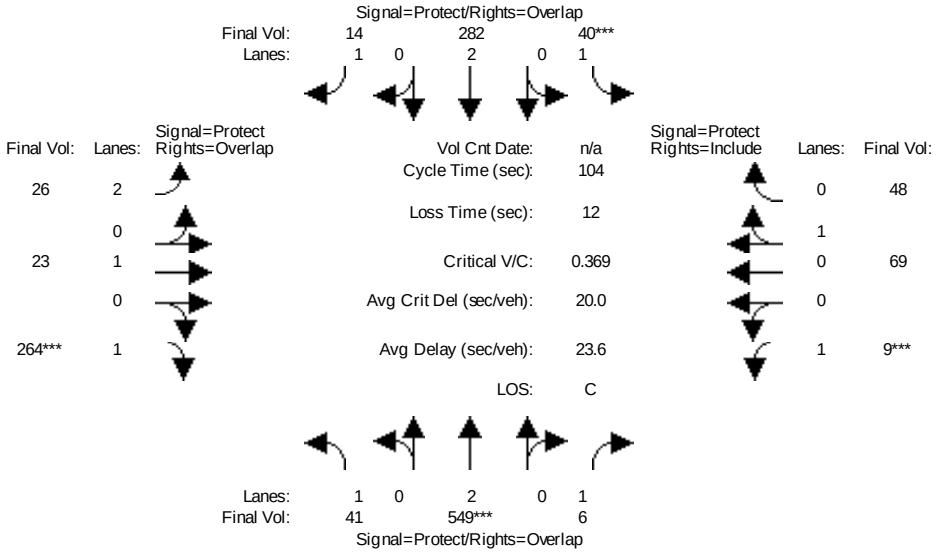


Street Name:	Hellyer Avenue						Piercy Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	243	630	14	33	428	146	28	60	65	2	15	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:	243	630	14	33	428	146	28	60	65	2	15	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:	243	630	14	33	428	146	28	60	65	2	15	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	630	14	33	428	146	28	60	65	2	15	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:	243	630	14	33	428	146	28	60	65	2	15	21
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	0.91	0.84
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	0.40	0.60
Final Sat.:	1663	3800	1488	1663	3800	1488	2992	1900	1488	1663	688	964
Capacity Analysis Module:												
Vol/Sat:	0.15	0.17	0.01	0.02	0.11	0.10	0.01	0.03	0.04	0.00	0.02	0.02
Crit Moves:	****				****		****				****	
Green/Cycle:	0.41	0.51	0.58	0.21	0.31	0.38	0.07	0.10	0.50	0.07	0.10	0.10
Volume/Cap:	0.36	0.32	0.02	0.10	0.36	0.26	0.14	0.33	0.09	0.02	0.23	0.23
Uniform Del:	21.4	14.8	9.3	33.3	27.6	22.1	45.7	43.9	13.4	45.3	43.4	43.4
IncremntDel:	0.3	0.1	0.0	0.1	0.2	0.2	0.3	1.1	0.1	0.1	0.7	0.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	21.7	14.9	9.3	33.4	27.8	22.3	46.0	44.9	13.5	45.4	44.2	44.2
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:	21.7	14.9	9.3	33.4	27.8	22.3	46.0	44.9	13.5	45.4	44.2	44.2
LOS by Move:	C	B	A	C	C	C	D	D	B	D	D	D
HCM2k95thQ:	11	11	0	2	10	7	1	4	2	0	3	3

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
BG_PM

Intersection #3: Hellyer / Piercy

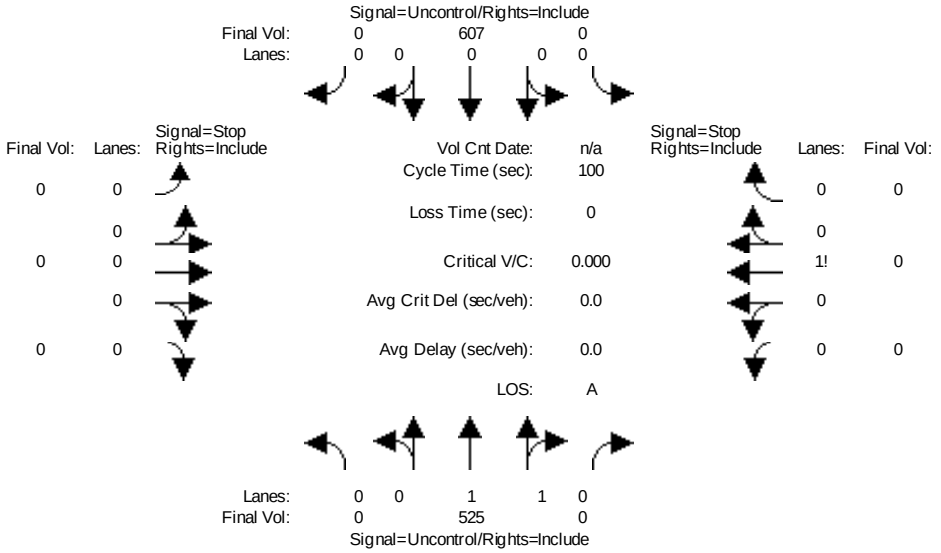


Street Name:	Hellyer Avenue						Piercy Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	41	549	6	40	282	14	26	23	264	9	69	48
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:	41	549	6	40	282	14	26	23	264	9	69	48
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:	41	549	6	40	282	14	26	23	264	9	69	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	549	6	40	282	14	26	23	264	9	69	48
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:	41	549	6	40	282	14	26	23	264	9	69	48
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	0.94	0.86
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	0.57	0.43
Final Sat.:	1663	3800	1488	1663	3800	1488	2992	1900	1488	1663	1016	707
Capacity Analysis Module:												
Vol/Sat:	0.02	0.14	0.00	0.02	0.07	0.01	0.01	0.01	0.18	0.01	0.07	0.07
Crit Moves:		****		****					****	****		
Green/Cycle:	0.20	0.43	0.49	0.07	0.29	0.45	0.16	0.32	0.53	0.07	0.23	0.23
Volume/Cap:	0.12	0.34	0.01	0.36	0.26	0.02	0.05	0.04	0.34	0.08	0.29	0.29
Uniform Del:	33.9	20.1	13.4	46.4	28.3	15.8	36.9	24.0	14.1	45.5	33.0	33.0
IncremntDel:	0.2	0.1	0.0	2.0	0.1	0.0	0.0	0.0	0.3	0.3	0.4	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	34.0	20.2	13.4	48.3	28.4	15.8	36.9	24.0	14.4	45.8	33.5	33.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.0	20.2	13.4	48.3	28.4	15.8	36.9	24.0	14.4	45.8	33.5	33.5
LOS by Move:	C	C	B	D	C	B	D	C	B	D	C	C
HCM2k95thQ:	2	11	0	4	7	1	1	1	10	1	7	7

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

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
BG_AM

Intersection #4: Hellyer / Project 1



Street Name:	Helllyer Avenue						Project Driveway 1					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	525	0	0	607	0	0	0	0	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	525	0	0	607	0	0	0	0	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	525	0	0	607	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	525	0	0	607	0	0	0	0	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1132	1132	263
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	227	205	781
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	227	205	781
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.00	0.00
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	0	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 Hellyer / Project 1

****

Base Volume Alternative: Peak Hour Warrant NOT Met

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

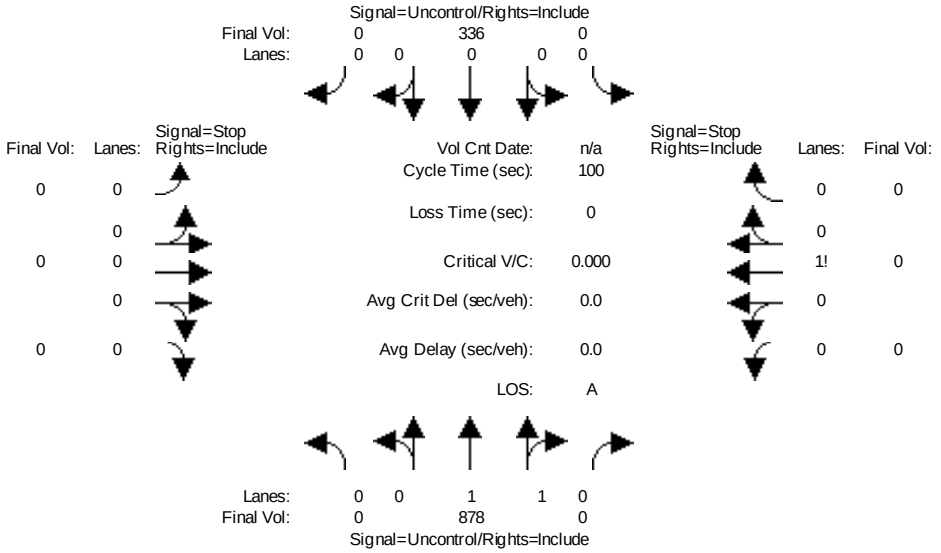
```
------------|--------------||--------------||--------------||--------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  1  0    0  0  1  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0  525     0     0  607     0     0    0     0     0    0     0
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
------------|--------------||--------------||--------------||--------------|
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
               Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #4 Hellyer / Project 1
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|--------------||--------------||--------------||--------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|--------------||--------------||--------------||--------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  1  0    0  0  1  0  0    0  0  0  0  0    0  0  1! 0  0
Initial Vol:    0  525     0     0  607     0     0    0     0     0    0     0
------------|--------------||--------------||--------------||--------------|
Major Street Volume:             1132
Minor Approach Volume:           0
Minor Approach Volume Threshold: 242
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
BG_PM

Intersection #4: Hellyer / Project 1




```
Street Name:         Helllyer Avenue                  Project Driveway 1
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  878     0     0  336     0     0    0     0     0    0     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0  878     0     0  336     0     0    0     0     0    0     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0  878     0     0  336     0     0    0     0     0    0     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0  878     0     0  336     0     0    0     0     0    0     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   6.4  6.5   6.2
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   3.5  4.0   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1214 1214   439
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx   202  183   622
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx   202  183   622
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx  0.00 0.00  0.00
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx    0 xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:         *                *                *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #4 Hellyer / Project 1
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
```

Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	0 0 1 0 0	0 0 0 0 0	0 0 1! 0 0
Initial Vol:	0 878 0	0 336 0	0 0 0	0 0 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #4 Hellyer / Project 1

****

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	0 0 1 0 0	0 0 0 0 0	0 0 1! 0 0
Initial Vol:	0 878 0	0 336 0	0 0 0	0 0 0

Major Street Volume: 1214
Minor Approach Volume: 0
Minor Approach Volume Threshold: 218

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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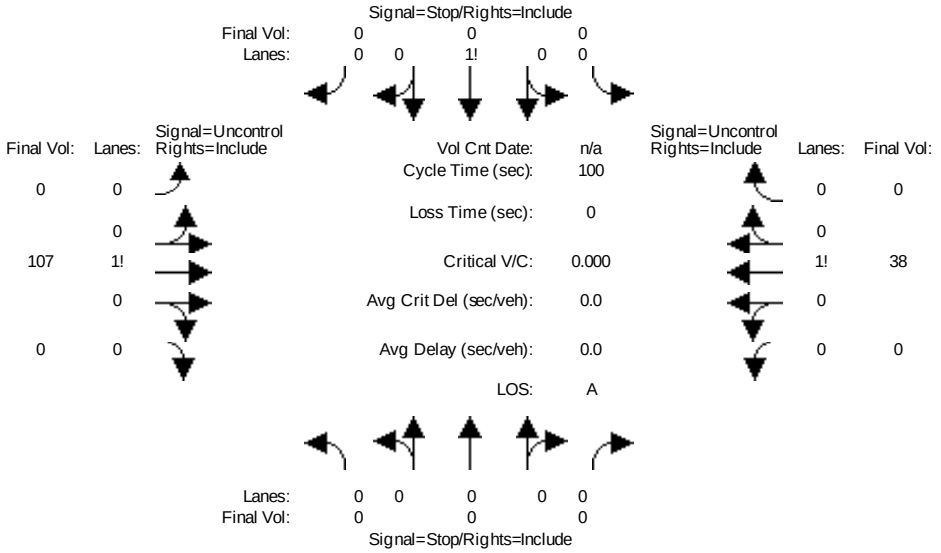
Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
BG_AM

Intersection #5: Piercy / Project 2




```
Street Name:         Project Driveway 2                  Piercy Road
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0    0     0     0  107     0     0   38     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0    0     0     0  107     0     0   38     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0    0     0     0  107     0     0   38     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0     0    0     0     0  107     0     0   38     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.4  6.5   6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5  4.0   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   145  145    38  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   852  750  1040  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   852  750  1040  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.00 0.00  0.00  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx    0 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:         *                *                *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #5 Piercy / Project 2
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
```

Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 1! 0 0	0 0 1 0 0	0 0 1 0 0
Initial Vol:	0 0 0	0 0 0	0 107 0	0 38 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER
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Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #5 Piercy / Project 2

****

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 1! 0 0	0 0 1 0 0	0 0 1 0 0
Initial Vol:	0 0 0	0 0 0	0 107 0	0 38 0

Major Street Volume: 145
Minor Approach Volume: 0
Minor Approach Volume Threshold: 734

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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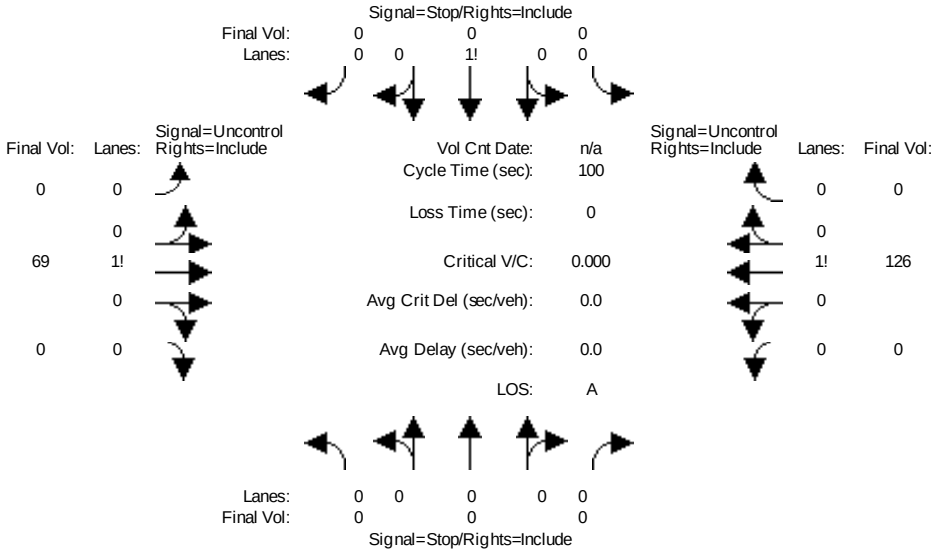
Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
BG_PM

Intersection #5: Piercy / Project 2



Street Name:	Project Driveway 2						Piercy Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	0	0	0	0	0	0	69	0	0	126	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	0	0	0	0	69	0	0	126	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	0	0	0	0	69	0	0	126	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	0	0	69	0	0	126	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	4.0	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	195	195	126	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	798	704	930	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	798	704	930	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.00	0.00	0.00	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	0	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	*			*			*			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #5 Piercy / Project 2

****

Base Volume Alternative: Peak Hour Warrant NOT Met

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

Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 1! 0 0	0 0 1 0 0	0 0 1 0 0
Initial Vol:	0 0 0	0 0 0	0 69 0	0 126 0
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx

SIGNAL WARRANT DISCLAIMER
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Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #5 Piercy / Project 2

****

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 1! 0 0	0 0 1 0 0	0 0 1 0 0
Initial Vol:	0 0 0	0 0 0	0 69 0	0 126 0

Major Street Volume: 195
Minor Approach Volume: 0
Minor Approach Volume Threshold: 655

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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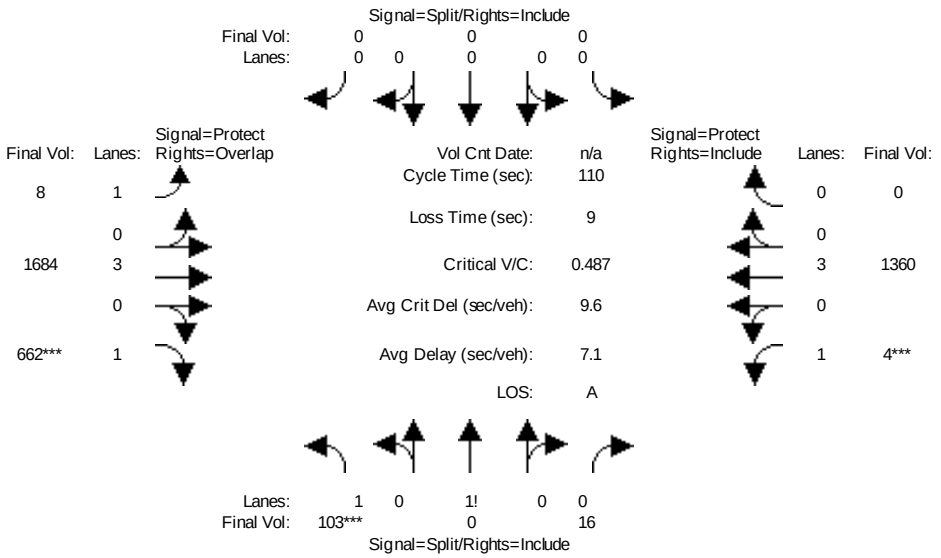
Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
BGPP_AM

Intersection #1: Silver Creek Valley / Piercy

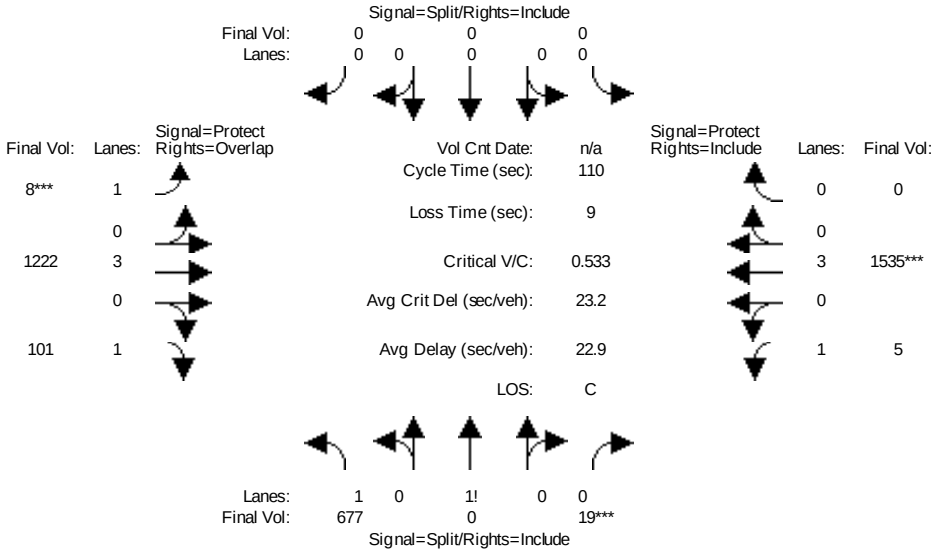


Street Name:	Piercy Road						Siilver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	103	0	16	0	0	0	8	1684	662	4	1360	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:	103	0	16	0	0	0	8	1684	662	4	1360	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:	103	0	16	0	0	0	8	1684	662	4	1360	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	103	0	16	0	0	0	8	1684	662	4	1360	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:	103	0	16	0	0	0	8	1684	662	4	1360	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	1.00	0.86	0.92	1.00	0.92	0.88	1.00	0.78	0.88	1.00	0.92
Lanes:	1.76	0.00	0.24	0.00	0.00	0.00	1.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	2896	0	389	0	0	0	1663	5700	1488	1663	5700	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.30	0.45	0.00	0.24	0.00
Crit Moves:	****								****	****		
Green/Cycle:	0.09	0.00	0.09	0.00	0.00	0.00	0.17	0.76	0.85	0.06	0.65	0.00
Volume/Cap:	0.39	0.00	0.45	0.00	0.00	0.00	0.03	0.39	0.52	0.04	0.37	0.00
Uniform Del:	47.1	0.0	47.4	0.0	0.0	0.0	37.7	4.4	2.1	48.3	8.7	0.0
IncremntDel:	0.8	0.0	1.2	0.0	0.0	0.0	0.0	0.1	0.4	0.1	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	48.0	0.0	48.6	0.0	0.0	0.0	37.7	4.4	2.5	48.5	8.8	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:	48.0	0.0	48.6	0.0	0.0	0.0	37.7	4.4	2.5	48.5	8.8	0.0
LOS by Move:	D	A	D	A	A	A	D	A	A	D	A	A
HCM2k95thQ:	5	0	6	0	0	0	0	12	13	0	13	0

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
BGPP_PM

Intersection #1: Silver Creek Valley / Piercy

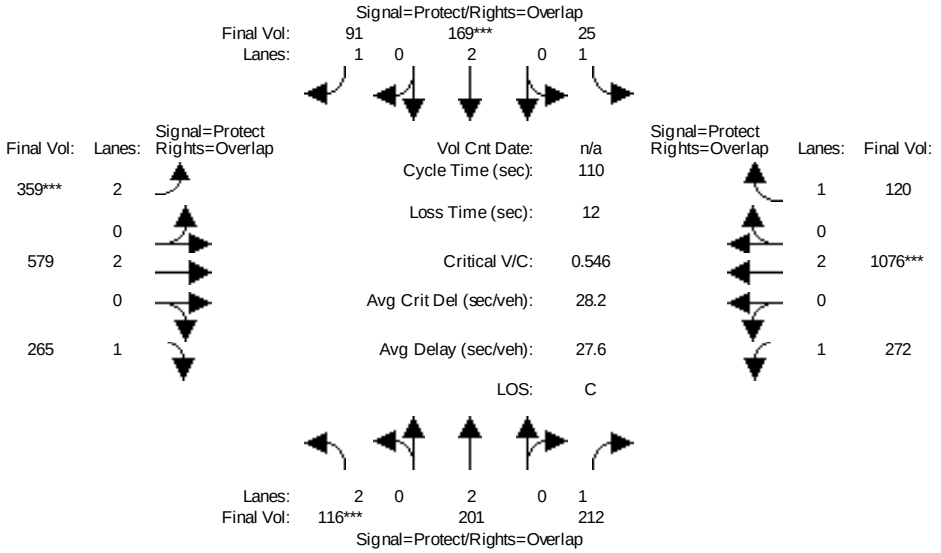


Street Name:	Piercy Road						Siilver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	677	0	19	0	0	0	8	1222	101	5	1535	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:	677	0	19	0	0	0	8	1222	101	5	1535	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:	677	0	19	0	0	0	8	1222	101	5	1535	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	677	0	19	0	0	0	8	1222	101	5	1535	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:	677	0	19	0	0	0	8	1222	101	5	1535	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	0.92	1.00	0.92	0.88	1.00	0.78	0.88	1.00	0.92
Lanes:	1.95	0.00	0.05	0.00	0.00	0.00	1.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3237	0	88	0	0	0	1663	5700	1488	1663	5700	0
Capacity Analysis Module:												
Vol/Sat:	0.21	0.00	0.21	0.00	0.00	0.00	0.00	0.21	0.07	0.00	0.27	0.00
Crit Moves:			****				****				****	
Green/Cycle:	0.38	0.00	0.38	0.00	0.00	0.00	0.06	0.42	0.79	0.12	0.48	0.00
Volume/Cap:	0.55	0.00	0.57	0.00	0.00	0.00	0.08	0.52	0.09	0.02	0.57	0.00
Uniform Del:	26.8	0.0	27.0	0.0	0.0	0.0	48.5	23.9	2.5	42.4	20.7	0.0
IncremntDel:	0.5	0.0	0.6	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.3	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	27.3	0.0	27.6	0.0	0.0	0.0	48.8	24.1	2.5	42.4	21.0	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:	27.3	0.0	27.6	0.0	0.0	0.0	48.8	24.1	2.5	42.4	21.0	0.0
LOS by Move:	C	A	C	A	A	A	D	C	A	D	C	A
HCM2k95thQ:	19	0	19	0	0	0	1	18	2	0	22	0

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
BGPP_AM

Intersection #2: SIlver Creek Valley / Hellyer

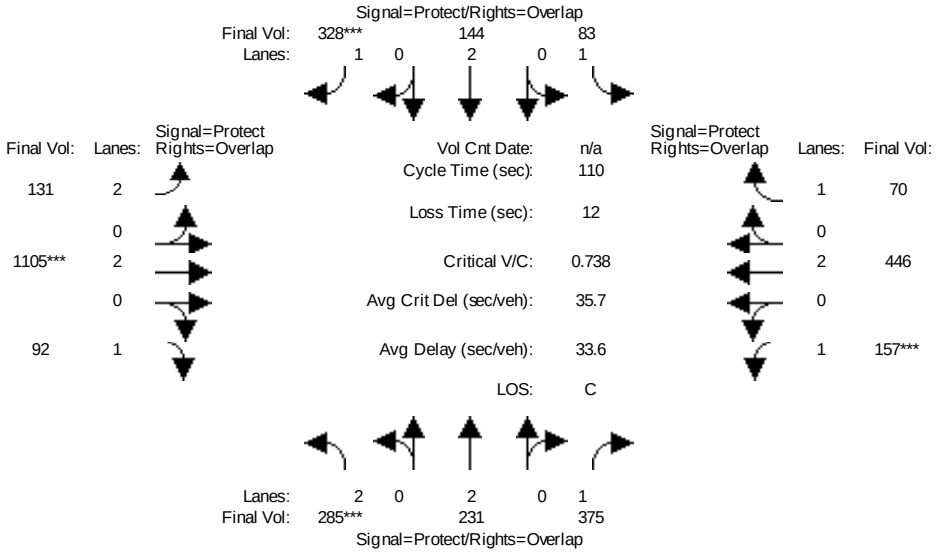


Street Name:	Hellyer Road						Silver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	116	201	212	25	169	91	359	579	265	272	1076	120
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:	116	201	212	25	169	91	359	579	265	272	1076	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	116	201	212	25	169	91	359	579	265	272	1076	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	201	212	25	169	91	359	579	265	272	1076	120
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:	116	201	212	25	169	91	359	579	265	272	1076	120
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.79	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	1.00	0.78
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.:	2992	3800	1488	1663	3800	1488	2992	3800	1488	1663	3800	1488
Capacity Analysis Module:												
Vol/Sat:	0.04	0.05	0.14	0.02	0.04	0.06	0.12	0.15	0.18	0.16	0.28	0.08
Crit Moves:	****				****		****				****	
Green/Cycle:	0.07	0.09	0.47	0.07	0.09	0.31	0.22	0.35	0.42	0.38	0.51	0.58
Volume/Cap:	0.55	0.56	0.30	0.23	0.49	0.20	0.55	0.43	0.42	0.43	0.55	0.14
Uniform Del:	49.5	47.6	17.8	48.7	47.6	28.0	38.3	27.3	22.3	25.4	18.2	10.6
IncremntDel:	3.2	2.0	0.2	1.0	1.1	0.2	1.0	0.2	0.5	0.5	0.3	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	52.6	49.5	18.1	49.7	48.7	28.3	39.3	27.5	22.8	25.9	18.6	10.7
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:	52.6	49.5	18.1	49.7	48.7	28.3	39.3	27.5	22.8	25.9	18.6	10.7
LOS by Move:	D	D	B	D	D	C	D	C	C	C	B	B
HCM2k95thQ:	5	7	9	2	7	5	12	14	13	14	22	4

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
BGPP_PM

Intersection #2: SIlver Creek Valley / Hellyer

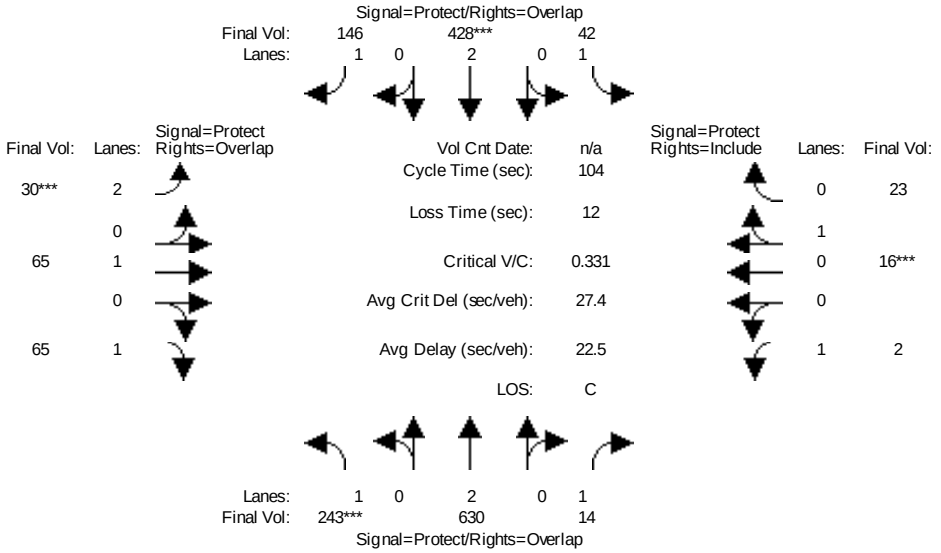


Street Name:	Hellyer Road						Silver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	285	231	375	83	144	328	131	1105	92	157	446	70
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:	285	231	375	83	144	328	131	1105	92	157	446	70
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:	285	231	375	83	144	328	131	1105	92	157	446	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	285	231	375	83	144	328	131	1105	92	157	446	70
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:	285	231	375	83	144	328	131	1105	92	157	446	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.79	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	1.00	0.78
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.:	2992	3800	1488	1663	3800	1488	2992	3800	1488	1663	3800	1488
Capacity Analysis Module:												
Vol/Sat:	0.10	0.06	0.25	0.05	0.04	0.22	0.04	0.29	0.06	0.09	0.12	0.05
Crit Moves:	****					****		****		****		
Green/Cycle:	0.13	0.24	0.37	0.10	0.21	0.40	0.18	0.39	0.52	0.13	0.34	0.44
Volume/Cap:	0.74	0.25	0.68	0.51	0.18	0.56	0.24	0.74	0.12	0.74	0.35	0.11
Uniform Del:	46.1	33.5	29.0	47.1	35.4	25.7	38.3	28.5	13.3	46.2	27.3	18.3
IncremntDel:	7.3	0.1	3.4	2.6	0.1	1.2	0.2	2.0	0.1	12.7	0.2	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	53.4	33.7	32.4	49.7	35.5	26.9	38.6	30.4	13.4	58.9	27.4	18.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.4	33.7	32.4	49.7	35.5	26.9	38.6	30.4	13.4	58.9	27.4	18.4
LOS by Move:	D	C	C	D	D	C	D	C	B	E	C	B
HCM2k95thQ:	11	6	21	7	4	18	4	28	3	14	11	3

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
BGPP_AM

Intersection #3: Hellyer / Piercy

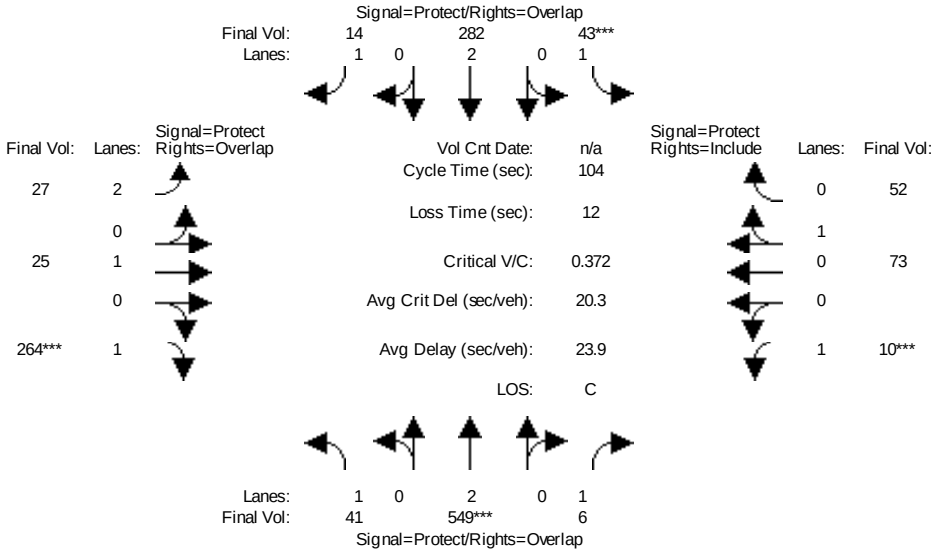


Street Name:	Hellyer Avenue						Piercy Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	243	630	14	42	428	146	30	65	65	2	16	23
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:	243	630	14	42	428	146	30	65	65	2	16	23
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:	243	630	14	42	428	146	30	65	65	2	16	23
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	630	14	42	428	146	30	65	65	2	16	23
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:	243	630	14	42	428	146	30	65	65	2	16	23
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	0.91	0.84
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	0.39	0.61
Final Sat.:	1663	3800	1488	1663	3800	1488	2992	1900	1488	1663	677	973
Capacity Analysis Module:												
Vol/Sat:	0.15	0.17	0.01	0.03	0.11	0.10	0.01	0.03	0.04	0.00	0.02	0.02
Crit Moves:	****				****		****				****	
Green/Cycle:	0.41	0.51	0.58	0.21	0.31	0.38	0.07	0.10	0.50	0.07	0.10	0.10
Volume/Cap:	0.36	0.32	0.02	0.12	0.36	0.26	0.15	0.36	0.09	0.02	0.25	0.25
Uniform Del:	21.4	14.8	9.3	33.4	27.6	22.1	45.7	44.0	13.4	45.3	43.5	43.5
IncremntDel:	0.3	0.1	0.0	0.2	0.2	0.2	0.3	1.2	0.1	0.1	0.8	0.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	21.7	14.9	9.3	33.6	27.8	22.3	46.0	45.2	13.5	45.4	44.3	44.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.7	14.9	9.3	33.6	27.8	22.3	46.0	45.2	13.5	45.4	44.3	44.3
LOS by Move:	C	B	A	C	C	C	D	D	B	D	D	D
HCM2k95thQ:	11	11	0	2	10	7	1	5	2	0	3	3

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
BGPP_PM

Intersection #3: Hellyer / Piercy

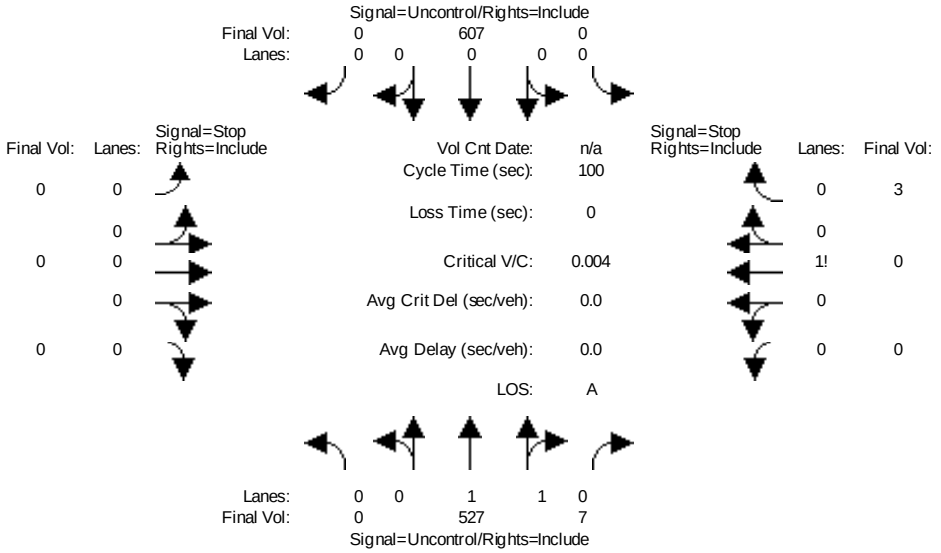


Street Name:	Hellyer Avenue						Piercy Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	41	549	6	43	282	14	27	25	264	10	73	52
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:	41	549	6	43	282	14	27	25	264	10	73	52
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:	41	549	6	43	282	14	27	25	264	10	73	52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	549	6	43	282	14	27	25	264	10	73	52
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:	41	549	6	43	282	14	27	25	264	10	73	52
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	0.94	0.86
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	0.56	0.44
Final Sat.:	1663	3800	1488	1663	3800	1488	2992	1900	1488	1663	1005	716
Capacity Analysis Module:												
Vol/Sat:	0.02	0.14	0.00	0.03	0.07	0.01	0.01	0.01	0.18	0.01	0.07	0.07
Crit Moves:		****		****					****	****		
Green/Cycle:	0.20	0.42	0.49	0.08	0.29	0.45	0.16	0.32	0.53	0.07	0.23	0.23
Volume/Cap:	0.12	0.34	0.01	0.34	0.25	0.02	0.06	0.04	0.34	0.09	0.32	0.32
Uniform Del:	33.8	20.4	13.7	45.6	28.2	15.8	37.0	24.3	14.2	45.5	33.4	33.4
IncremntDel:	0.2	0.1	0.0	1.6	0.1	0.0	0.0	0.0	0.3	0.3	0.5	0.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	33.9	20.5	13.7	47.3	28.3	15.8	37.1	24.3	14.5	45.9	33.9	33.9
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:	33.9	20.5	13.7	47.3	28.3	15.8	37.1	24.3	14.5	45.9	33.9	33.9
LOS by Move:	C	C	B	D	C	B	D	C	B	D	C	C
HCM2k95thQ:	2	11	0	4	7	1	1	1	10	1	7	7

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

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
BGPP_AM

Intersection #4: Hellyer / Project 1



Street Name:	Helllyer Avenue						Project Driveway 1					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	527	7	0	607	0	0	0	0	0	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	527	7	0	607	0	0	0	0	0	0	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	527	7	0	607	0	0	0	0	0	0	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	527	7	0	607	0	0	0	0	0	0	3
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	267
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	777
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	777
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.7
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	A
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			9.7		
ApproachLOS:	*			*			*			A		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 Hellyer / Project 1

****

Base Volume Alternative: Peak Hour Warrant NOT Met

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

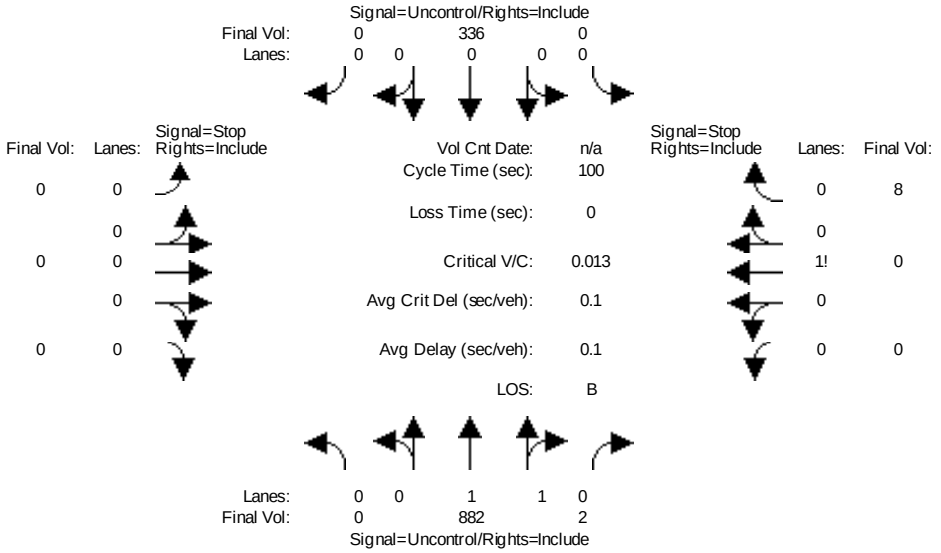
```
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  1  0    0  0  1  0  0    0  0  0  0  0    0  0  0  0  1
Initial Vol:    0  527     7     0  607     0     0    0     0     0    0     3
ApproachDel:    xxxxxx           xxxxxx           xxxxxx              9.7
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=3]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1144]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #4 Hellyer / Project 1
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  1  0    0  0  1  0  0    0  0  0  0  0    0  0  0  0  1
Initial Vol:    0  527     7     0  607     0     0    0     0     0    0     3
------------|---------------||---------------||---------------||---------------|
Major Street Volume:              1141
Minor Approach Volume:            3
Minor Approach Volume Threshold: 239
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
BGPP_PM

Intersection #4: Hellyer / Project 1



Street Name:	Helllyer Avenue						Project Driveway 1					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	882	2	0	336	0	0	0	0	0	0	8
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	882	2	0	336	0	0	0	0	0	0	8
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	882	2	0	336	0	0	0	0	0	0	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	882	2	0	336	0	0	0	0	0	0	8
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	442
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	620
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	620
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.01
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	10.9
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	B
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			10.9		
ApproachLOS:	*			*			*			B		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 Hellyer / Project 1

****

Base Volume Alternative: Peak Hour Warrant NOT Met

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

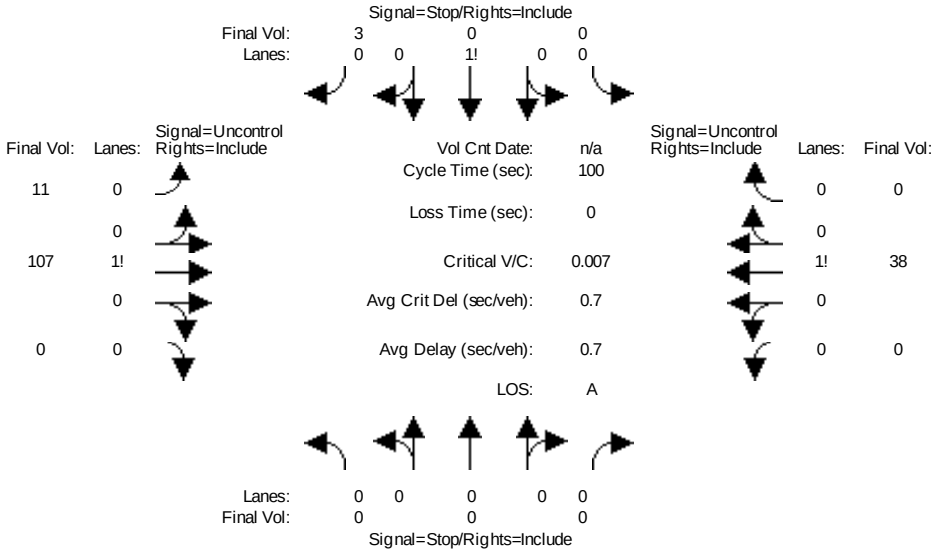
```
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  1  0    0  0  1  0  0    0  0  0  0  0    0  0  0  0  1
Initial Vol:    0  882     2     0  336     0     0    0     0     0    0     8
ApproachDel:    xxxxxx           xxxxxx           xxxxxx             10.9
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=8]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1228]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
               Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #4 Hellyer / Project 1
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  1  0    0  0  1  0  0    0  0  0  0  0    0  0  0  0  1
Initial Vol:    0  882     2     0  336     0     0    0     0     0    0     8
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             1220
Minor Approach Volume:           8
Minor Approach Volume Threshold: 216
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
BGPP_AM

Intersection #5: Piercy / Project 2




```
Street Name:         Project Driveway 2                  Piercy Road
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0    0     3    11  107     0     0   38     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0    0     3    11  107     0     0   38     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0     0     0    0     3    11  107     0     0   38     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0     0    0     3    11  107     0     0   38     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx    38    38 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx  1040  1585 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx  1040  1585 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.00  0.01 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx   0.0   0.0 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx   8.5   7.3 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     A     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.3 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx              8.5           xxxxxx           xxxxxx
ApproachLOS:         *                A                *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #5 Piercy / Project 2
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
```

Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 1 0 0 0	0 0 1 0 0
Initial Vol:	0 0 0	0 0 3	11 107 0	0 38 0
ApproachDel:	xxxxxx	8.5	xxxxxx	xxxxxx

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=3]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=159]
FAIL - Total volume less than 650 for intersection
with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #5 Piercy / Project 2

****

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 1 0 0 0	0 0 1 0 0
Initial Vol:	0 0 0	0 0 3	11 107 0	0 38 0

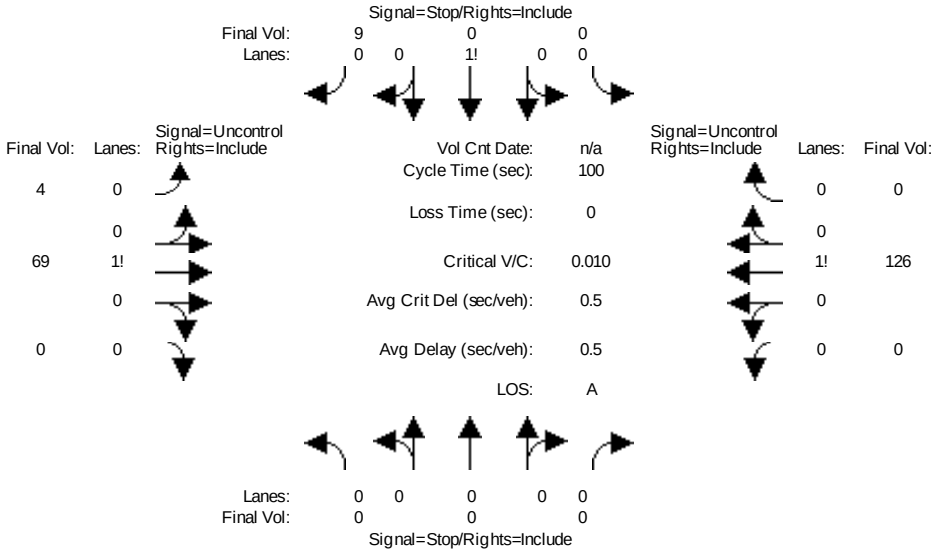
Major Street Volume: 156
Minor Approach Volume: 3
Minor Approach Volume Threshold: 715

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
BGPP_PM

Intersection #5: Piercy / Project 2



Street Name:	Project Driveway 2						Piercy Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Volume Module:												
Base Vol:	0	0	0	0	0	9	4	69	0	0	126	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	0	0	9	4	69	0	0	126	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	0	0	9	4	69	0	0	126	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	9	4	69	0	0	126	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	126	126	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	930	1473	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	930	1473	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.9	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			8.9			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #5 Piercy / Project 2

****

Base Volume Alternative: Peak Hour Warrant NOT Met

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

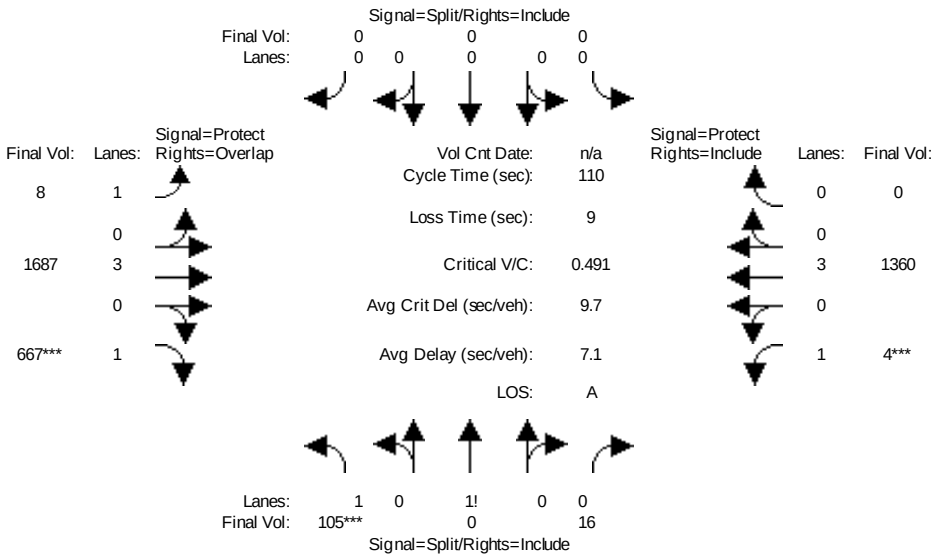
```
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  1  0  0  0    0  0  1  0  0
Initial Vol:    0    0     0     0    0     9     4   69     0     0  126     0
ApproachDel:    xxxxxx              8.9           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=9]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=208]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
               Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Piercy / Project 2
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  1  0  0  0    0  0  1  0  0
Initial Vol:    0    0     0     0    0     9     4   69     0     0  126     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             199
Minor Approach Volume:           9
Minor Approach Volume Threshold: 650
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```


Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
CUM_AM

Intersection #1: Silver Creek Valley / Piercy

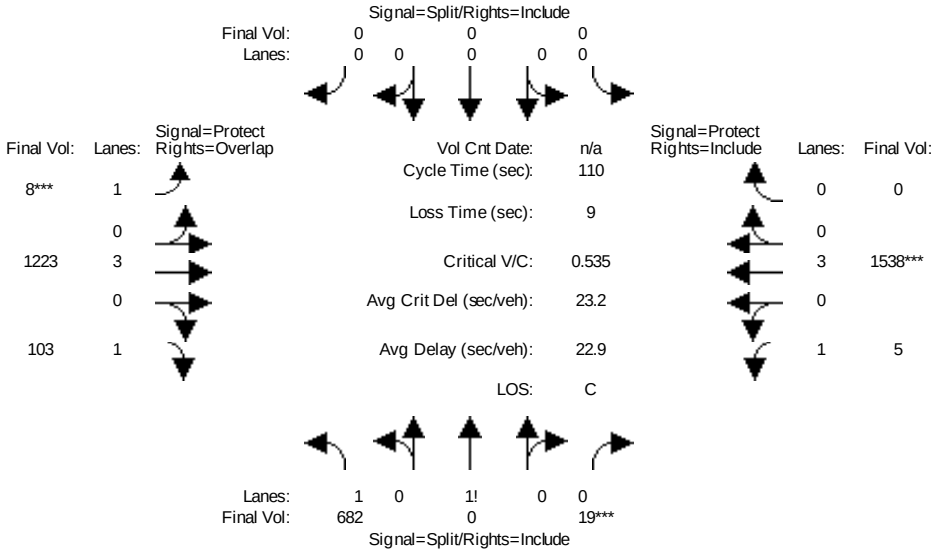


Street Name:	Piercy Road						Siilver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	105	0	16	0	0	0	8	1687	667	4	1360	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:	105	0	16	0	0	0	8	1687	667	4	1360	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:	105	0	16	0	0	0	8	1687	667	4	1360	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	105	0	16	0	0	0	8	1687	667	4	1360	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:	105	0	16	0	0	0	8	1687	667	4	1360	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	1.00	0.86	0.92	1.00	0.92	0.88	1.00	0.78	0.88	1.00	0.92
Lanes:	1.77	0.00	0.23	0.00	0.00	0.00	1.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	2902	0	384	0	0	0	1663	5700	1488	1663	5700	0
Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.04	0.00	0.00	0.00	0.00	0.30	0.45	0.00	0.24	0.00
Crit Moves:	****								****	****		
Green/Cycle:	0.09	0.00	0.09	0.00	0.00	0.00	0.17	0.76	0.85	0.06	0.65	0.00
Volume/Cap:	0.40	0.00	0.46	0.00	0.00	0.00	0.03	0.39	0.52	0.04	0.37	0.00
Uniform Del:	47.2	0.0	47.4	0.0	0.0	0.0	37.7	4.4	2.1	48.3	8.7	0.0
IncremntDel:	0.9	0.0	1.3	0.0	0.0	0.0	0.0	0.1	0.4	0.1	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	48.0	0.0	48.7	0.0	0.0	0.0	37.7	4.4	2.5	48.5	8.8	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:	48.0	0.0	48.7	0.0	0.0	0.0	37.7	4.4	2.5	48.5	8.8	0.0
LOS by Move:	D	A	D	A	A	A	D	A	A	D	A	A
HCM2k95thQ:	5	0	6	0	0	0	0	12	13	0	13	0

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
CUM_PM

Intersection #1: Silver Creek Valley / Piercy

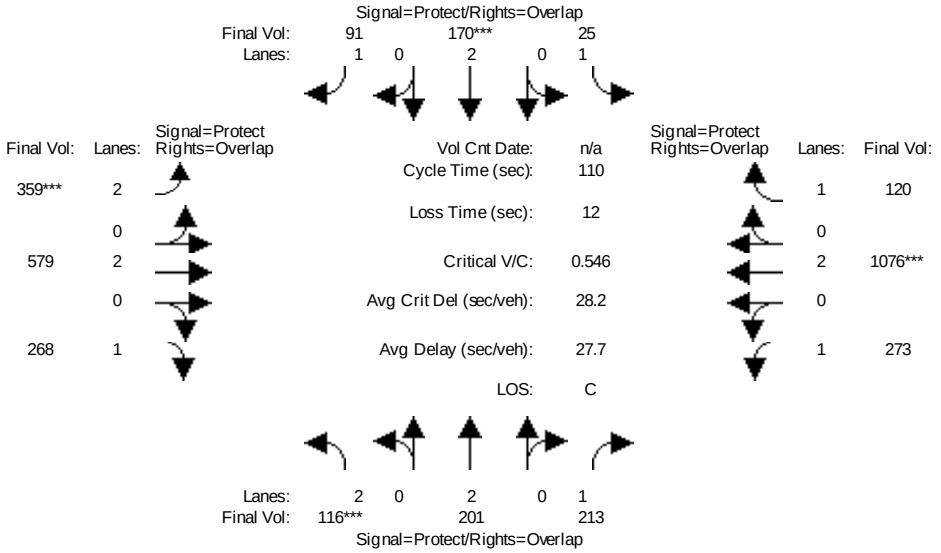


Street Name:	Piercy Road						Siilver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	0	0	0	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	682	0	19	0	0	0	8	1223	103	5	1538	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:	682	0	19	0	0	0	8	1223	103	5	1538	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:	682	0	19	0	0	0	8	1223	103	5	1538	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	682	0	19	0	0	0	8	1223	103	5	1538	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:	682	0	19	0	0	0	8	1223	103	5	1538	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.88	0.92	1.00	0.92	0.88	1.00	0.78	0.88	1.00	0.92
Lanes:	1.95	0.00	0.05	0.00	0.00	0.00	1.00	3.00	1.00	1.00	3.00	0.00
Final Sat.:	3238	0	88	0	0	0	1663	5700	1488	1663	5700	0
Capacity Analysis Module:												
Vol/Sat:	0.21	0.00	0.22	0.00	0.00	0.00	0.00	0.21	0.07	0.00	0.27	0.00
Crit Moves:			****				****				****	
Green/Cycle:	0.38	0.00	0.38	0.00	0.00	0.00	0.06	0.41	0.80	0.12	0.47	0.00
Volume/Cap:	0.55	0.00	0.57	0.00	0.00	0.00	0.08	0.52	0.09	0.02	0.57	0.00
Uniform Del:	26.7	0.0	26.9	0.0	0.0	0.0	48.5	24.0	2.5	42.4	20.8	0.0
IncremntDel:	0.5	0.0	0.6	0.0	0.0	0.0	0.3	0.2	0.0	0.0	0.3	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	27.3	0.0	27.6	0.0	0.0	0.0	48.8	24.2	2.5	42.5	21.1	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:	27.3	0.0	27.6	0.0	0.0	0.0	48.8	24.2	2.5	42.5	21.1	0.0
LOS by Move:	C	A	C	A	A	A	D	C	A	D	C	A
HCM2k95thQ:	19	0	20	0	0	0	1	18	2	0	22	0

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
CUM_AM

Intersection #2: SIlver Creek Valley / Hellyer

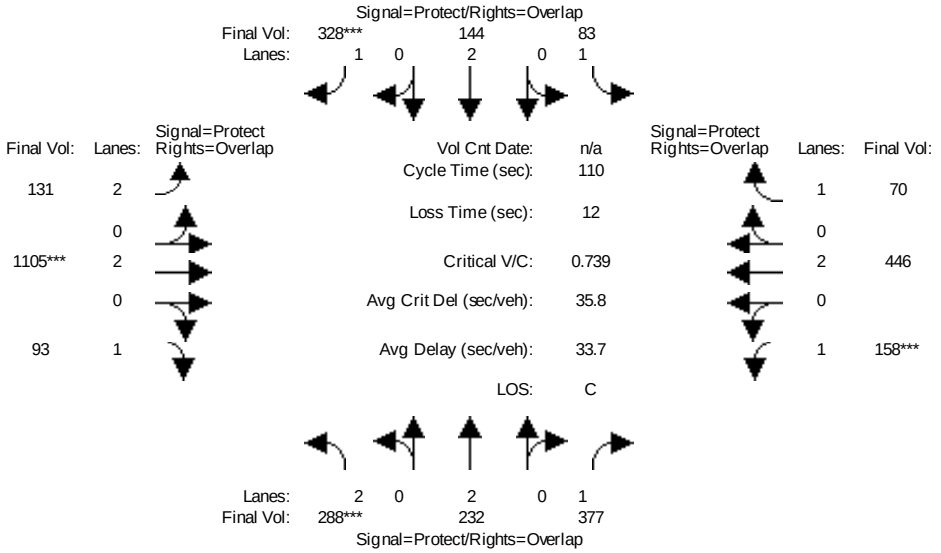


Street Name:	Hellyer Road						Silver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	116	201	213	25	170	91	359	579	268	273	1076	120
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:	116	201	213	25	170	91	359	579	268	273	1076	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	116	201	213	25	170	91	359	579	268	273	1076	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	201	213	25	170	91	359	579	268	273	1076	120
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:	116	201	213	25	170	91	359	579	268	273	1076	120
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.79	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	1.00	0.78
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.:	2992	3800	1488	1663	3800	1488	2992	3800	1488	1663	3800	1488
Capacity Analysis Module:												
Vol/Sat:	0.04	0.05	0.14	0.02	0.04	0.06	0.12	0.15	0.18	0.16	0.28	0.08
Crit Moves:	****				****		****				****	
Green/Cycle:	0.07	0.09	0.47	0.07	0.09	0.31	0.22	0.35	0.42	0.38	0.51	0.58
Volume/Cap:	0.55	0.56	0.30	0.23	0.49	0.20	0.55	0.43	0.43	0.43	0.55	0.14
Uniform Del:	49.5	47.6	17.8	48.7	47.6	28.0	38.3	27.3	22.5	25.4	18.2	10.6
IncremntDel:	3.2	2.0	0.2	1.0	1.1	0.2	1.0	0.2	0.5	0.5	0.3	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	52.6	49.5	18.1	49.7	48.7	28.3	39.3	27.5	22.9	25.9	18.6	10.7
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:	52.6	49.5	18.1	49.7	48.7	28.3	39.3	27.5	22.9	25.9	18.6	10.7
LOS by Move:	D	D	B	D	D	C	D	C	C	C	B	B
HCM2k95thQ:	5	7	9	2	7	5	12	14	13	14	22	4

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
CUM_PM

Intersection #2: SIlver Creek Valley / Hellyer

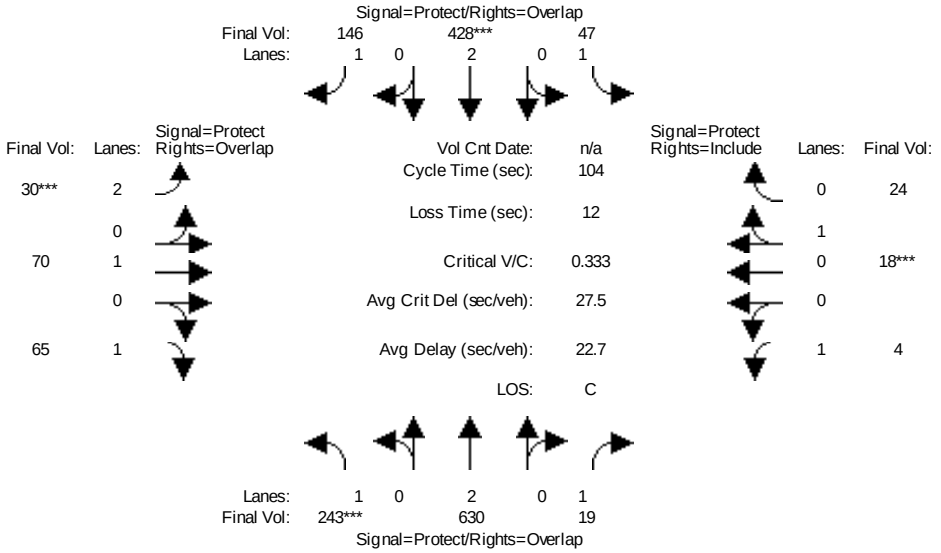


Street Name:	Hellyer Road						Silver Creek Valley Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	288	232	377	83	144	328	131	1105	93	158	446	70
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:	288	232	377	83	144	328	131	1105	93	158	446	70
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:	288	232	377	83	144	328	131	1105	93	158	446	70
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	288	232	377	83	144	328	131	1105	93	158	446	70
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:	288	232	377	83	144	328	131	1105	93	158	446	70
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.79	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	1.00	0.78
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.:	2992	3800	1488	1663	3800	1488	2992	3800	1488	1663	3800	1488
Capacity Analysis Module:												
Vol/Sat:	0.10	0.06	0.25	0.05	0.04	0.22	0.04	0.29	0.06	0.10	0.12	0.05
Crit Moves:	****					****		****		****		
Green/Cycle:	0.13	0.24	0.37	0.10	0.21	0.40	0.18	0.39	0.52	0.13	0.34	0.44
Volume/Cap:	0.74	0.25	0.68	0.51	0.18	0.56	0.24	0.74	0.12	0.74	0.35	0.11
Uniform Del:	46.0	33.5	29.0	47.1	35.5	25.8	38.4	28.6	13.3	46.2	27.3	18.3
IncremntDel:	7.3	0.1	3.4	2.6	0.1	1.2	0.2	2.0	0.1	12.8	0.2	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	53.4	33.6	32.4	49.7	35.6	27.0	38.6	30.6	13.4	59.0	27.4	18.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.4	33.6	32.4	49.7	35.6	27.0	38.6	30.6	13.4	59.0	27.4	18.4
LOS by Move:	D	C	C	D	D	C	D	C	B	E	C	B
HCM2k95thQ:	11	6	21	7	4	18	4	28	3	14	11	3

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
CUM_AM

Intersection #3: Hellyer / Piercy

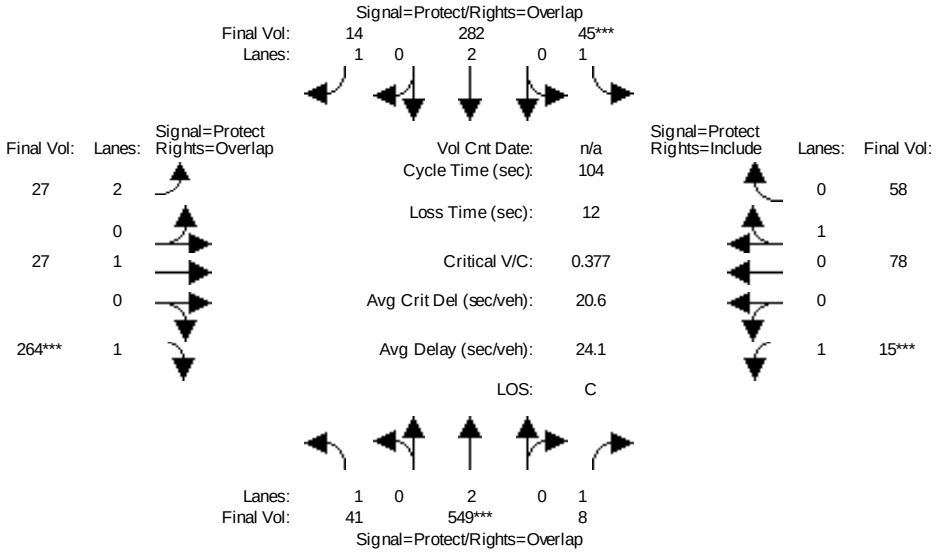


Street Name:	Hellyer Avenue						Piercy Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	243	630	19	47	428	146	30	70	65	4	18	24
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:	243	630	19	47	428	146	30	70	65	4	18	24
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:	243	630	19	47	428	146	30	70	65	4	18	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	243	630	19	47	428	146	30	70	65	4	18	24
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:	243	630	19	47	428	146	30	70	65	4	18	24
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	0.91	0.84
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	0.41	0.59
Final Sat.:	1663	3800	1488	1663	3800	1488	2992	1900	1488	1663	710	946
Capacity Analysis Module:												
Vol/Sat:	0.15	0.17	0.01	0.03	0.11	0.10	0.01	0.04	0.04	0.00	0.03	0.03
Crit Moves:	****				****		****				****	
Green/Cycle:	0.41	0.51	0.58	0.21	0.31	0.38	0.07	0.10	0.50	0.07	0.10	0.10
Volume/Cap:	0.36	0.32	0.02	0.14	0.36	0.26	0.15	0.38	0.09	0.04	0.26	0.26
Uniform Del:	21.4	14.8	9.3	33.5	27.6	22.1	45.7	44.1	13.4	45.3	43.6	43.6
IncremntDel:	0.3	0.1	0.0	0.2	0.2	0.2	0.3	1.3	0.1	0.1	0.9	0.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	21.7	14.9	9.3	33.7	27.8	22.3	46.0	45.4	13.5	45.5	44.5	44.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	21.7	14.9	9.3	33.7	27.8	22.3	46.0	45.4	13.5	45.5	44.5	44.5
LOS by Move:	C	B	A	C	C	C	D	D	B	D	D	D
HCM2k95thQ:	11	11	1	3	10	7	1	5	2	0	3	3

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

Level Of Service Computation Report
2000 HCM Operations (Base Volume Alternative)
CUM_PM

Intersection #3: Hellyer / Piercy

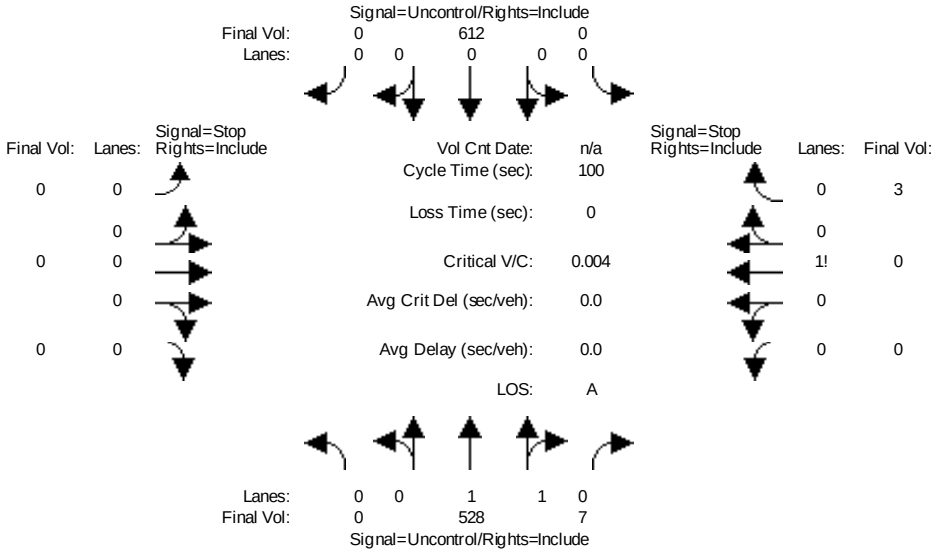


Street Name:	Hellyer Avenue						Piercy Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	41	549	8	45	282	14	27	27	264	15	78	58
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:	41	549	8	45	282	14	27	27	264	15	78	58
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:	41	549	8	45	282	14	27	27	264	15	78	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	549	8	45	282	14	27	27	264	15	78	58
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:	41	549	8	45	282	14	27	27	264	15	78	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	1.00	0.78	0.88	1.00	0.78	0.79	1.00	0.78	0.88	0.94	0.86
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	2.00	1.00	1.00	1.00	0.55	0.45
Final Sat.:	1663	3800	1488	1663	3800	1488	2992	1900	1488	1663	984	732
Capacity Analysis Module:												
Vol/Sat:	0.02	0.14	0.01	0.03	0.07	0.01	0.01	0.01	0.18	0.01	0.08	0.08
Crit Moves:		****			****				****	****		
Green/Cycle:	0.20	0.42	0.49	0.08	0.29	0.45	0.16	0.32	0.52	0.07	0.23	0.23
Volume/Cap:	0.12	0.34	0.01	0.34	0.25	0.02	0.06	0.04	0.34	0.13	0.35	0.35
Uniform Del:	33.7	20.5	13.8	45.4	28.1	15.8	37.1	24.4	14.3	45.6	33.7	33.7
IncremntDel:	0.2	0.1	0.0	1.6	0.1	0.0	0.0	0.0	0.3	0.5	0.5	0.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	33.9	20.6	13.8	47.0	28.2	15.8	37.1	24.4	14.6	46.2	34.2	34.2
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:	33.9	20.6	13.8	47.0	28.2	15.8	37.1	24.4	14.6	46.2	34.2	34.2
LOS by Move:	C	C	B	D	C	B	D	C	B	D	C	C
HCM2k95thQ:	2	11	0	4	7	1	1	1	10	1	8	8

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

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
CUM_AM

Intersection #4: Hellyer / Project 1



Street Name:	Helllyer Avenue						Project Driveway 1					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	528	7	0	612	0	0	0	0	0	0	3
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	528	7	0	612	0	0	0	0	0	0	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	528	7	0	612	0	0	0	0	0	0	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	528	7	0	612	0	0	0	0	0	0	3
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	268
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	776
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	776
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.00
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	9.7
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	A
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			9.7		
ApproachLOS:	*			*			*			A		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 Hellyer / Project 1

****

Base Volume Alternative: Peak Hour Warrant NOT Met

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

Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	0 0 1 0 0	0 0 0 0 0	0 0 0 0 1
Initial Vol:	0 528 7	0 612 0	0 0 0	0 0 3
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	9.7

Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=3]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1150]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #4 Hellyer / Project 1

****

Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Lanes:	0 0 1 1 0	0 0 1 0 0	0 0 0 0 0	0 0 0 0 1
Initial Vol:	0 528 7	0 612 0	0 0 0	0 0 3

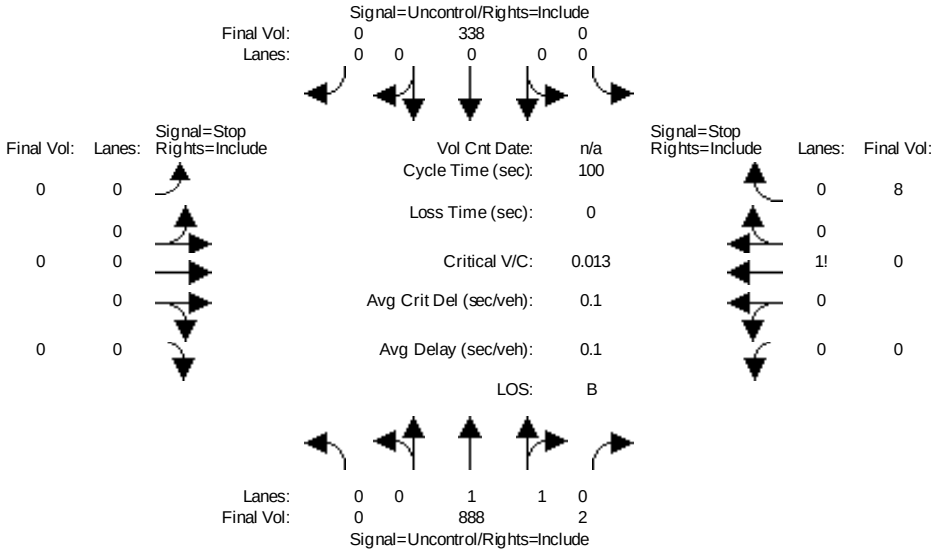
Major Street Volume: 1147
Minor Approach Volume: 3
Minor Approach Volume Threshold: 238

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
CUM_PM

Intersection #4: Hellyer / Project 1




```
Street Name:         Helllyer Avenue                Project Driveway 1
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0  888     2     0  338     0     0    0     0     0    0     8
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  888     2     0  338     0     0    0     0     0    0     8
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  888     2     0  338     0     0    0     0     0    0     8
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0  888     2     0  338     0     0    0     0     0    0     8
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   6.2
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx   3.3
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   445
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   617
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   617
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  0.01
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx   0.0
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx  10.9
LOS by Move:    *    *     *     *    *     *     *    *     *     *    *     B
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:    xxxxxx           xxxxxx           xxxxxx             10.9
ApproachLOS:         *                *                *                B
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #4 Hellyer / Project 1
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
```

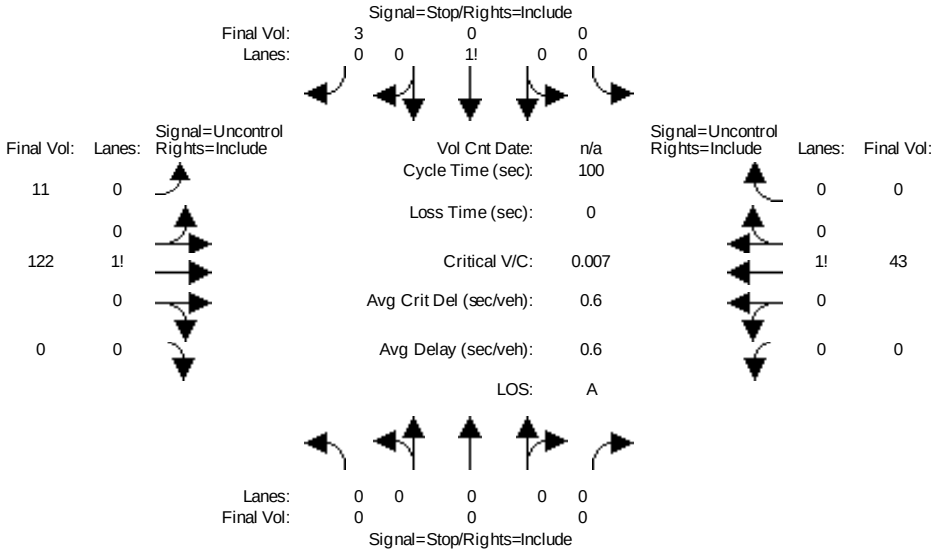
```
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  1  0    0  0  1  0  0    0  0  0  0  0    0  0  0  0  1
Initial Vol:    0  888     2     0  338     0     0    0     0     0    0     8
ApproachDel:    xxxxxx           xxxxxx           xxxxxx             10.9
------------|---------------||---------------||---------------||---------------|
Approach[westbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=8]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1236]
   SUCCEED - Total volume greater than or equal to 650 for intersection
             with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #4 Hellyer / Project 1
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Uncontrolled     Uncontrolled      Stop Sign        Stop Sign
Lanes:        0  0  1  1  0    0  0  1  0  0    0  0  0  0  0    0  0  0  0  1
Initial Vol:    0  888     2     0  338     0     0    0     0     0    0     8
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             1228
Minor Approach Volume:           8
Minor Approach Volume Threshold: 214
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
CUM_AM

Intersection #5: Piercy / Project 2



Street Name:	Project Driveway 2						Piercy Road					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Volume Module:												
Base Vol:	0	0	0	0	0	3	11	122	0	0	43	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	0	0	3	11	122	0	0	43	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	0	0	3	11	122	0	0	43	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	0	0	3	11	122	0	0	43	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	43	43	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	1033	1579	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	1033	1579	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.00	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	8.5	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	A	A	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	A	*	*	*	*	*
ApproachDel:	xxxxxx			8.5			xxxxxx			xxxxxx		
ApproachLOS:	*			A			*			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #5 Piercy / Project 2

****

Base Volume Alternative: Peak Hour Warrant NOT Met

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

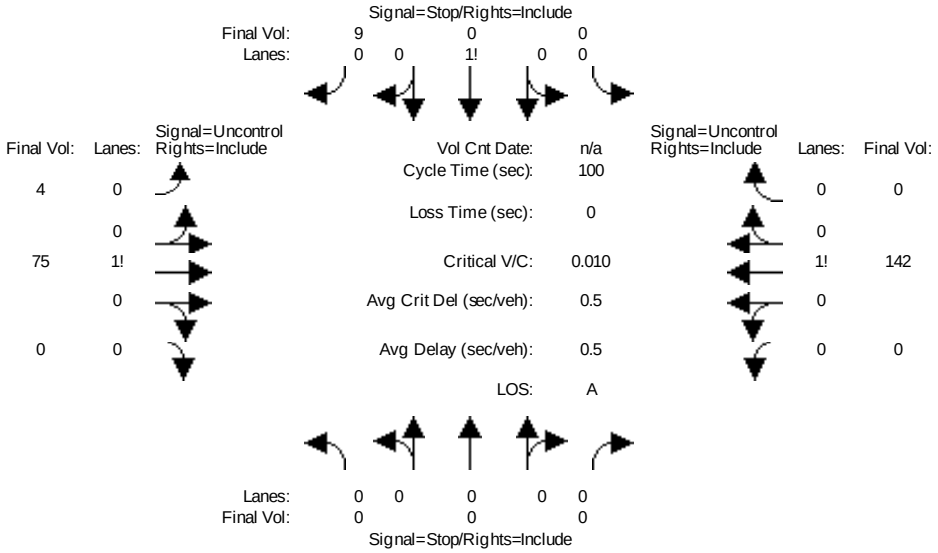
```
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  1  0  0  0    0  0  1  0  0
Initial Vol:    0    0     0     0    0     3    11  122     0     0   43     0
ApproachDel:    xxxxxx              8.5           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=3]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=179]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
               Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 Piercy / Project 2
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  0    0  0  0  0  1    0  1  0  0  0    0  0  1  0  0
Initial Vol:    0    0     0     0    0     3    11  122     0     0   43     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             176
Minor Approach Volume:           3
Minor Approach Volume Threshold: 683
--------------------------------------------------------------------------------
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an
"indicator" of the likelihood of an unsignalized intersection warranting
a traffic signal in the future.  Intersections that exceed this warrant
are probably more likely to meet one or more of the other volume based
signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace
a rigorous and complete traffic signal warrant analysis by the responsible
jurisdiction.  Consideration of the other signal warrants, which is beyond
the scope of this software, may yield different results.
```

Level Of Service Computation Report
2000 HCM Unsignalized (Base Volume Alternative)
CUM_PM

Intersection #5: Piercy / Project 2




```
Street Name:         Project Driveway 2                  Piercy Road
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0    0     9     4   75     0     0  142     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     0    0     9     4   75     0     0  142     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     0    0     9     4   75     0     0  142     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0     0     0    0     9     4   75     0     0  142     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx   6.2   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx   142   142 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx   911  1453 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx   911  1453 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  0.01  0.00 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx xxxxx  xxxx xxxx   0.0   0.0 xxxx xxxxx  xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx xxxxx xxxx   9.0   7.5 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     A     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx xxxxx xxxx xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.5 xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     *    *     *
ApproachDel:    xxxxxx              9.0           xxxxxx           xxxxxx
ApproachLOS:         *                A                *                *
Note: Queue reported is the number of cars per lane.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #5 Piercy / Project 2
********************************************************************************
Base Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
```

Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 1 0 0 0	0 0 1 0 0
Initial Vol:	0 0 0	0 0 9	4 75 0	0 142 0
ApproachDel:	xxxxxx	9.0	xxxxxx	xxxxxx

Approach[southbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=9]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=230]
FAIL - Total volume less than 650 for intersection
with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

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Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #5 Piercy / Project 2

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Base Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 0 0 0	0 0 0 0 1	0 1 0 0 0	0 0 1 0 0
Initial Vol:	0 0 0	0 0 9	4 75 0	0 142 0

Major Street Volume: 221
Minor Approach Volume: 9
Minor Approach Volume Threshold: 622

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Appendices F – Warehouse Development Site Research

Warehouse Site Research			
Project	**Office Space (ksf)**	**Warehouse Space (ksf)**	**% of Office Space**
469 Piercy	**5,000**	**127,793**	**3.77%**
Silver Creek	10,000	216,873	4.41%
Qume-Bridge	20,000	714,491	2.72%
Rue Ferrari	10,000	302,772	3.20%
1605 7th Street	10,000	94,325	9.59%
2256 Junction TA	10,000	305,800	3.17%