

APPENDIX I

Local Transportation

Analysis

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HEXAGON TRANSPORTATION CONSULTANTS, INC.

2880 Alum Rock Avenue Residential Mixed-Use Development

Local Transportation Analysis

Prepared for:

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Executive Summary

This report presents the results of the local transportation analysis (LTA) conducted for a proposed affordable residential mixed-use development located at 2880 Alum Rock Avenue in San Jose, California. The project involves demolishing an existing vacant 8,200 square foot (s.f.) commercial building on the 1.32-acre project site and constructing two 6-story buildings with a total of 164 affordable apartment units and up to 7,500 s.f. of retail space. Building A would consist of 119 affordable apartment units (5 residential levels) over a maximum of 7,500 s.f. of ground level retail space and a 29-space secure at-grade parking level. Building B would consist of 45 affordable apartment units (5 residential levels) over a 13-space secure at-grade parking level. Access to the project site would be provided via a single full-access driveway on Alum Rock Avenue.

The project site is located within the Alum Rock Avenue East Urban Village, a Horizon 1 future Urban Village. Urban Villages are walkable, bicycle-friendly, transit-oriented, mixed-use settings that provide both housing and jobs, thus supporting the Envision San Jose 2040 General Plan's environmental goals. The project fronts Alum Rock Avenue, which is designated as a Grand Boulevard within the Envision San Jose 2040 General Plan. Grand Boulevards are major transportation corridors with transit priority that connect city neighborhoods.

This study was conducted for the purpose of identifying the potential transportation impacts and traffic operations effects related to the project. The transportation impacts of the project were evaluated following the standards and methodologies established by the City of San Jose. Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the screening criteria contained in the *Transportation Analysis Handbook* (April 2018), the project is expected to result in a less-than-significant CEQA transportation impact. Therefore, a vehicle-miles traveled (VMT) analysis is not required for the project. However, an LTA is required and was prepared to identify potential traffic operational issues related to the project. The LTA includes an evaluation of weekday AM and PM peak hour traffic conditions for four signalized intersections in the immediate vicinity of the project site. The LTA also includes an analysis of site access, on-site circulation, parking, vehicle queuing, and effects on transit, bicycle, and pedestrian facilities.

Local Transportation Analysis

Project Trip Generation

Vehicle trips that would be generated by the proposed residential mixed-use project were estimated using the ITE average trip rates for "Multifamily Housing Mid-Rise" (ITE Land Use 221) and "Shopping Center" (ITE Land Use 820) located in a General Urban/Suburban setting. The project trip generation was reduced based on site location factors, applicable internal and external trip reductions, and project-specific factors in accordance with standard San Jose procedures. After applying the ITE trip rates and applicable trip reductions, the proposed project is estimated to generate 849 daily vehicle trips, with 51

new trips (15 inbound and 36 outbound) occurring during the AM peak hour and 68 new trips (40 inbound and 28 outbound) occurring during the PM peak hour.

Intersection Traffic Operations

The results of the analysis show that the signalized study intersections would operate at an acceptable level of service (LOS D or better) during both the AM and PM peak hours of traffic under all traffic scenarios.

Other Transportation Items

The project would not have an adverse effect on the existing pedestrian, bicycle, or transit facilities in the area. The proposed site plan shows adequate site access and on-site circulation, and no significant operational issues are expected to occur as a result of the project. Below are recommendations resulting from the site plan review.

Recommendations

- Include at least 6 feet of red curb on the west side of the project driveway on Alum Rock Avenue to ensure adequate sight distance is provided.
- Provide adequate space for vehicles to turn around at each end of the main drive aisle.
- Either relocate or reorient the motorcycle parking spaces within the Building A parking garage to provide more backup room for residents using the parking stall situated adjacent to the commercial trash room; or assign this parking stall to a resident with a compact vehicle.
- Assign the parking stall situated adjacent to the boiler room within the Building B parking garage to a resident with a compact vehicle.
- Provide at least one off-street loading space for residential move-in/move-out and commercial freight loading activities.
- Pay an in-lieu fee of \$121 per linear feet (LF) of project site frontage to go toward implementing the protected bike lanes (Class IV) that are planned along Alum Rock Avenue as described in the San Jose Better Bike Plan 2025.
- Coordinate with the City of San Jose Planning Department to determine whether the project would be required to provide additional motorcycle parking for the residential component of the project.

1.

Introduction

This report presents the results of the local transportation analysis (LTA) conducted for a proposed affordable residential mixed-use development located at 2880 Alum Rock Avenue in San Jose, California (see Figure 1). The project involves demolishing an existing vacant 8,200 square foot (s.f.) commercial building on the 1.32-acre project site and constructing two 6-story buildings with a total of 164 affordable apartment units and up to 7,500 s.f. of retail space. Building A would consist of 119 affordable apartment units (5 residential levels) over a maximum of 7,500 s.f. of ground level retail space and a 29-space secure at-grade parking level. Building B would consist of 45 affordable apartment units (5 residential levels) over a 13-space secure at-grade parking level. Access to the project site would be provided via a single full-access driveway on Alum Rock Avenue.

The project site is located within the Alum Rock Avenue East Urban Village, a Horizon 1 future Urban Village. Urban Villages are walkable, bicycle-friendly, transit-oriented, mixed-use settings that provide both housing and jobs, thus supporting the Envision San Jose 2040 General Plan's environmental goals. The Urban Village strategy fosters:

- Mixed residential and employment activities that are attractive to an innovative workforce
- Revitalization of underutilized properties that have access to existing infrastructure
- Densities that support transit use, bicycling, and walking
- High-quality urban design

The project fronts Alum Rock Avenue, which is designated as a Grand Boulevard within the Envision San Jose 2040 General Plan. Grand Boulevards serve as major transportation corridors that connect City neighborhoods. In most cases Grand Boulevards are primary routes for VTA Light Rail Transit (LRT), Bus Rapid Transit (BRT), and standard/community buses, as well as other public transit vehicles. As a Grand Boulevard, the Santa Clara Street/Alum Rock Avenue BRT system operates along the corridor with BRT buses running in the median lanes on Alum Rock Avenue between 34th Street and Alexander Avenue, approximately ¼ mile west of the project site.

Study Purpose

This study was conducted for the purpose of identifying the potential transportation impacts and traffic operations effects related to the project. The transportation impacts of the project were evaluated following the standards and methodologies established by the City of San Jose. Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the screening criteria contained in the *Transportation Analysis Handbook* (April 2018), the project is expected to result in a less-than-significant CEQA transportation impact. Therefore, a vehicle-miles traveled (VMT) analysis is not required for the project. However, an LTA is required and was prepared to identify potential traffic operational issues related to the project.

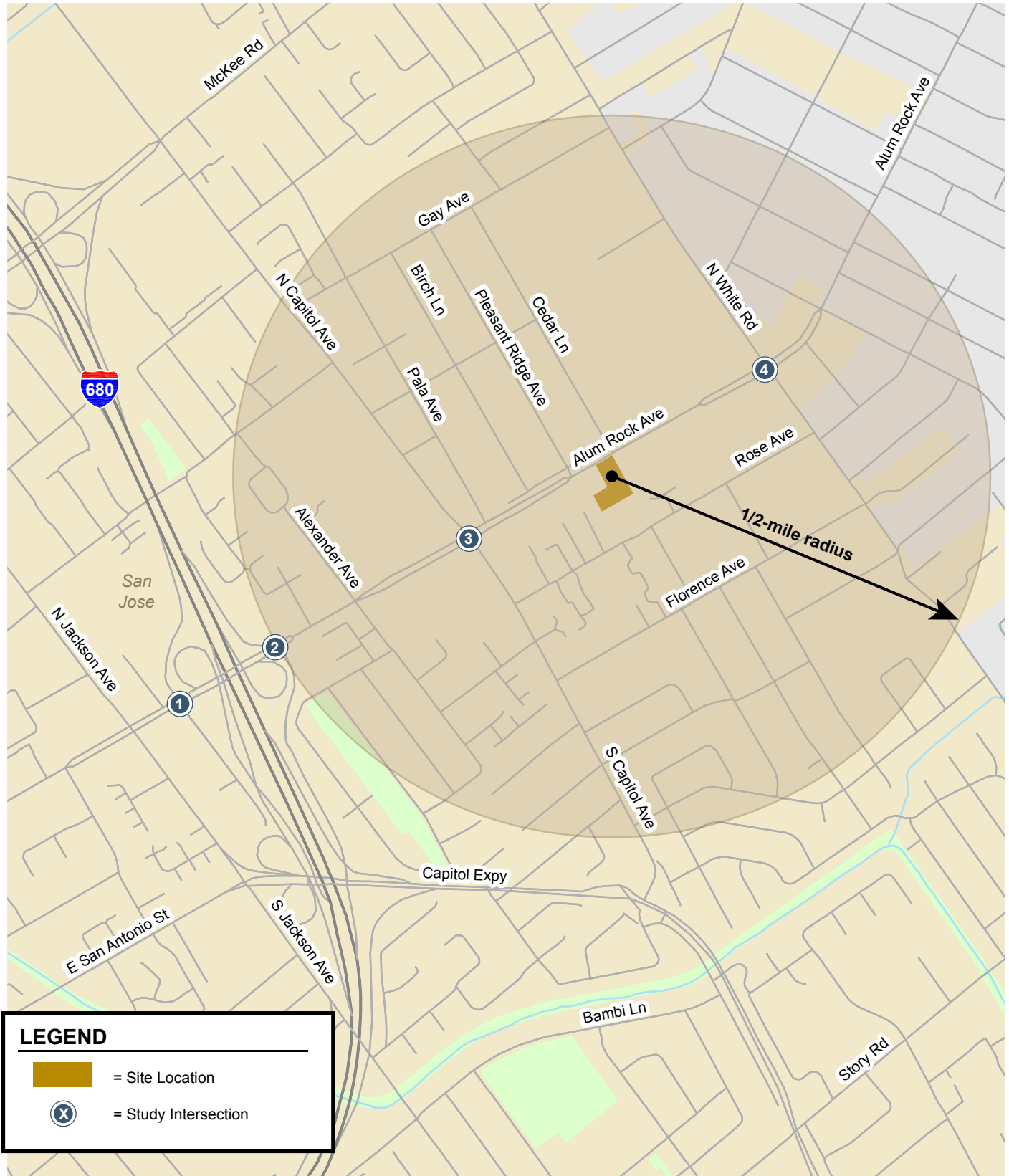


Figure 1
Site Location and Study Intersections

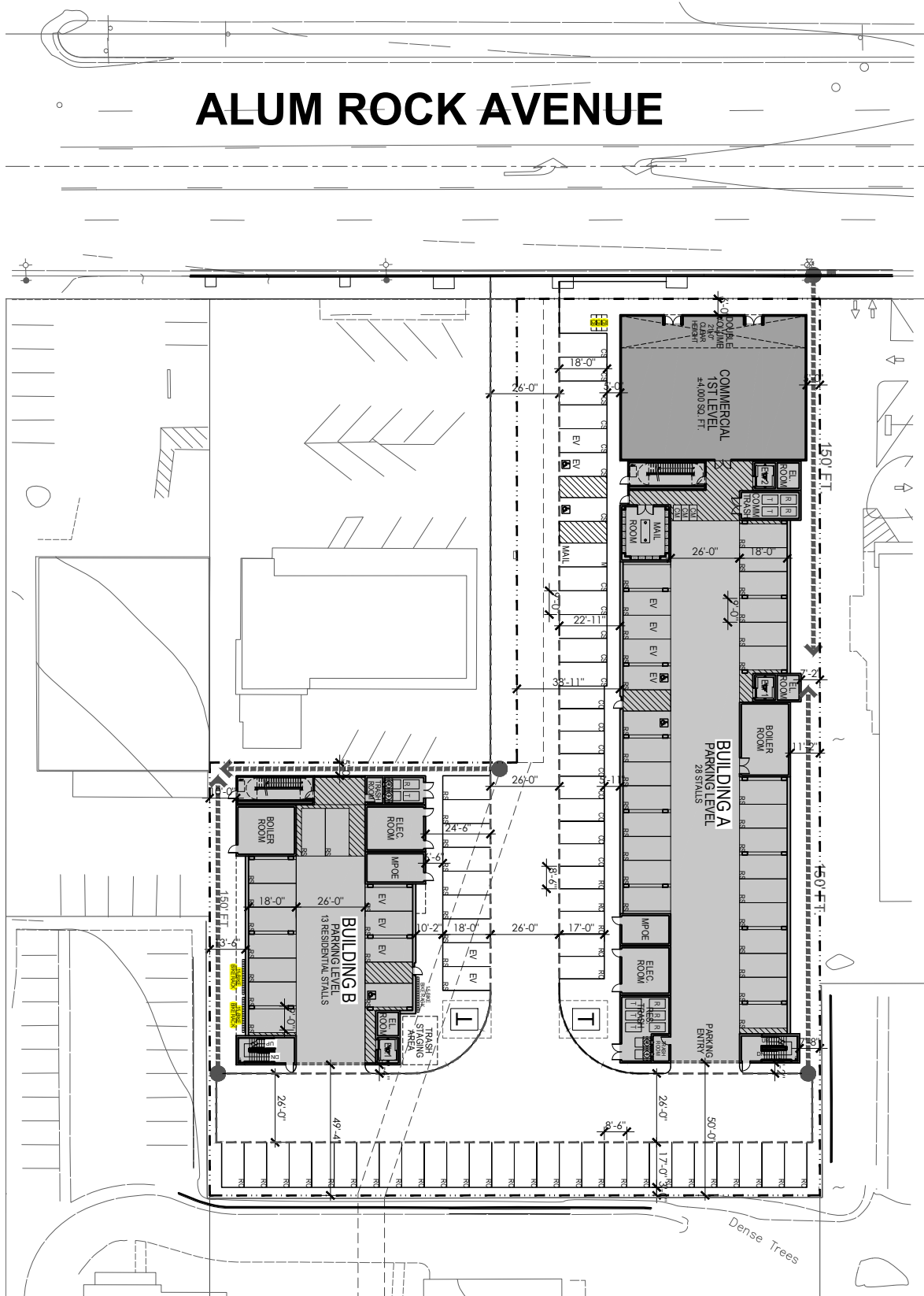


Figure 2
Site Plan

Transportation Analysis Policy

Historically, transportation analysis has utilized delay and congestion on the roadway system as the primary metric for the identification of traffic impacts and potential roadway improvements to relieve traffic congestion that may result due to proposed/planned growth. However, the State of California has recognized the limitations of measuring and mitigating only vehicle delay at intersections and in 2013 passed Senate Bill (SB) 743, which requires jurisdictions to stop using congestion and delay metrics, such as Level of Service (LOS), as the measurement for CEQA transportation analysis. With the adoption of SB 743 legislation, public agencies are now required to base the determination of transportation impacts on VMT rather than level of service.

In adherence to SB 743, the City of San Jose has adopted a new Transportation Analysis Policy, Council Policy 5-1. The policy replaces its predecessor (Policy 5-3) and establishes the thresholds for transportation impacts under the CEQA based on VMT instead of LOS. The intent of this change is to shift the focus of transportation analysis under CEQA from vehicle delay and roadway auto capacity to a reduction in vehicle emissions, and the creation of robust multimodal networks that support integrated land uses.

The new transportation policy aligns with the currently adopted General Plan which seeks to focus new development growth within Planned Growth Areas, bringing together office, residential, and supporting service land uses to internalize trips and reduce VMT. All new projects are required to analyze transportation impacts using the VMT metric and conform to Policy 5-1.

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

- Accommodate and encourage the use of non-automobile transportation modes to achieve San Jose's mobility goals and reduce vehicle trip generation and VMT (TR-1.1);
- Consider impacts on overall mobility and all travel modes when evaluating transportation impacts of new developments or infrastructure projects (TR-1.2);
- Increase substantially the proportion of commute travel using modes other than the single-occupant vehicle in order to meet the City's mode split targets for San Jose residents and workers (TR-1.3);
- Through the entitlement process for new development, projects shall be required to fund or construct needed transportation improvements for all transportation modes, giving first consideration to improvement of bicycling, walking and transit facilities and services that encourage reduced vehicle travel demand (TR-1.4);
- Actively coordinate with regional transportation, land use planning, and transit agencies to develop a transportation network with complementary land uses that encourage travel by bicycling, walking and transit, and ensure that regional greenhouse gas emissions standards are met (TR-1.8);
- Give priority to the funding of multimodal projects that provide the most benefit to all users. Evaluate new transportation projects to make the most efficient use of transportation resources and capacity (TR-1.9);

- Coordinate the planning and implementation of citywide bicycle and pedestrian facilities and supporting infrastructure. Give priority to bicycle and pedestrian safety and access improvements at street crossings and near areas with higher pedestrian concentrations (school, transit, shopping, hospital, and mixed-use areas) (TR-2.1);
- Provide a continuous pedestrian and bicycle system to enhance connectivity throughout the City by completing missing segments. Eliminate or minimize physical obstacles and barriers that impede pedestrian and bicycle movement on City streets. Include consideration of grade-separated crossings at railroad tracks and freeways. Provide safe bicycle and pedestrian connections to all facilities regularly accessed by the public, including the Mineta San Jose International Airport (TR-2.2);
- Integrate the financing, design and construction of pedestrian and bicycle facilities with street projects. Build pedestrian and bicycle improvements at the same time as improvements for vehicular circulation (TR-2.5);
- Require new development where feasible to provide on-site facilities such as bicycle storage and showers, provide connections to existing and planned facilities, dedicate land to expand existing facilities or provide new facilities such as sidewalks and/or bicycle lanes/paths, or share in the cost of improvements (TR-2.8);
- Coordinate and collaborate with local School Districts to provide enhanced, safer bicycle and pedestrian connections to school facilities throughout San Jose (TR-2.10);
- As part of the development review process, require that new development along existing and planned transit facilities consist of land use and development types and intensities that contribute towards transit ridership, and require that new development is designed to accommodate and provide direct access to transit facilities (TR-3.3);
- Support the development of amenities and land use and development types and intensities that increase daily ridership on the VTA, BART, Caltrain, ACE and Amtrak California systems and provide positive fiscal, economic, and environmental benefits to the community (TR-4.1);
- Promote transit-oriented development with reduced parking requirements and promote amenities around appropriate transit hubs and stations to facilitate the use of available transit services (TR-8.1);
- Balance business viability and land resources by maintaining an adequate supply of parking to serve demand while avoiding excessive parking supply that encourages auto use (TR-8.2);
- Support using parking supply limitations and pricing as strategies to encourage the use of non-automobile modes (TR-8.3);
- Discourage, as part of the entitlement process, the provision of parking spaces significantly above the number of spaces required by code for a given use (TR-8.4);
- Allow reduced parking requirements for mixed-use developments and for developments providing shared parking or a comprehensive transportation demand management (TDM) program, or developments located near major transit hubs or within Urban Villages and other Growth Areas (TR-8.6);
- Within new development, create and maintain a pedestrian-friendly environment by connecting the internal components with safe, convenient, accessible, and pleasant pedestrian facilities and by requiring pedestrian connections between building entrances, other site features, and adjacent public streets (CD-3.3);

- Create a pedestrian-friendly environment by connecting new residential development with safe, convenient, accessible, and pleasant pedestrian facilities. Provide such connections between new development, its adjoining neighborhood, transit access points, schools, parks, and nearby commercial areas (LU-9.1);
- Facilitate the development of housing close to jobs to provide residents with the opportunity to live and work in the same community (LU-10.5);
- Encourage all developers to install and maintain trails when new development occurs adjacent to a designated trail location. Use the City's Parkland Dedication Ordinance and Park Impact Ordinance to have residential developers build trails when new residential development occurs adjacent to a designated trail location, consistent with other parkland priorities. Encourage developers or property owners to enter into formal agreements with the City to maintain trails adjacent to their properties (PR-8.5).

CEQA Transportation Analysis Scope

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

A project's VMT is compared to the appropriate thresholds of significance based on the project location and type of development. When assessing a residential project, the project's VMT is divided by the number of residents expected to occupy the project to determine the VMT per capita. When assessing an office or industrial project, the project's VMT is divided by the number of employees to determine the VMT per employee. The 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 is expected to have the project VMT lower than the average area VMT, while a project located in a suburban area is expected to generate project VMT higher than the average area VMT. For non-residential or non-office projects, very large projects or projects that can potentially shift travel patterns, the City's Travel Demand Forecasting Model can be used to determine project VMT.

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, industrial, and retail projects with local traffic. The tool calculates a project's VMT and compares it to the appropriate thresholds of significance based on the project location (i.e., assessor's parcel number) and type of development. 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. Projects located in areas where the existing VMT is above the established threshold are referred to as being in "high-VMT areas". Projects in high-VMT areas are required to include a set of VMT reduction measures that would reduce the project VMT to the extent possible.

Screening Criteria for VMT Analysis Exemption

The City of San Jose's *Transportation Analysis Handbook, 2018* includes screening criteria for projects that are expected to result in a less-than-significant VMT impact based on the project description, characteristics and/or location. The residential component of the proposed project, which is a restricted affordable residential development located within a Planned Growth Area (Alum Rock Avenue East Urban Village) with low VMT and high-quality transit, meets the screening criteria set forth in the *Transportation Analysis Handbook*. The retail component of the project also meets the screening criteria. The City's screening criteria for CEQA transportation analysis for Restricted Affordable Residential Projects and Local-Serving Retail projects are described below.

Screening Criteria for Restricted Affordable Residential Projects

Affordability: 100% restricted affordable units, excluding unrestricted manager units; affordability must extend for a minimum of 55 years for rental homes or 45 years for for-sale homes; and

Planned Growth Areas: Located within a Planned Growth Area as defined in the Envision San Jose 2040 General Plan; and

High-Quality Transit: Located within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor; and

Transit-Supporting Project Density:

- Minimum of 35 units per acre for residential projects or components;
- If located in a Planned Growth Area with a maximum density below 35 units per acre, the maximum density allowed in the Planned Growth Area must be met; and

Transportation Demand Management (TDM): If located in an area in which the per capita VMT is higher than the CEQA significance threshold, a robust TDM Plan must be included; and

Parking:

- No more than the minimum number of parking spaces required;
- If located in Urban Villages or Downtown, the number of parking spaces must be adjusted to the lowest amount allowed; however, if the parking is shared, publicly available, and/or “unbundled”, the number of parking spaces can be up to the zoned minimum; and

Active Transportation: Not negatively impact transit, bike or pedestrian infrastructure.

Screening Criteria for Local-Serving Retail

- 100,000 square feet of total gross floor area or less without drive-through operations.

The project would meet the screening criteria as follows:

- 100% affordable residential units;
- Located within the future Alum Rock Avenue East Urban Village (planned growth area);
- Located within ½ mile of high-quality transit (LRT and BRT);
- Residential density of 125 DU/AC (greater than 35 DU/AC);
- Located in an area in which the per capita VMT is lower than the CEQA significance threshold, thus, no TDM Plan is required (see VMT Evaluation Tool Summary Report in Appendix C);
- Parking would be provided at a reduced parking rate per Assembly Bill (AB) 744; and
- Retail is less than 100,000 square feet of total gross floor area with no drive-through.

Since both components of the project would meet the screening criteria, the project is expected to result in a less-than-significant VMT impact, and no CEQA transportation analysis is required. Although the project is exempt from a VMT analysis, a Local Transportation Analysis (LTA) must be prepared to identify potential operational issues that may arise due to the project, as described below.

Local Transportation Analysis Scope

A local transportation analysis (LTA) identifies potential adverse operational effects that may arise due to a development project, evaluates the effects of the project on transportation, access, circulation, and related safety elements in the proximate area of the project, and typically supplements the VMT analysis.

As part of the LTA, a project is typically required to conduct an intersection operations analysis if the project is expected to add 10 or more vehicle trips per hour per lane to any signalized intersection that is located within a half-mile of the project site. City of San Jose staff may also require an intersection LOS analysis at their discretion based on engineering judgement. Based on these criteria, as outlined in the City's *Transportation Analysis Handbook*, a list of study intersections is developed. The LTA comprises an analysis of AM and PM peak-hour traffic conditions for the following 4 signalized intersections (see Figure 1):

Study Intersections:

1. I-680 Southbound Off-Ramp & Alum Rock Avenue
2. I-680 Northbound Off-Ramp & Alum Rock Avenue
3. Capitol Avenue and Alum Rock Avenue
4. White Road and Alum Rock Avenue

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

Traffic conditions were evaluated for the following scenarios: Existing conditions, Background conditions, and Background Plus Project conditions. Traffic volumes for all scenarios are tabulated in Appendix A. The traffic scenarios are described in detail below.

- **Existing Conditions.** Due the current COVID-19 pandemic situation, the City of San Jose is requiring that all new traffic counts for study intersections be put on hold until further notice. Instead of conducting new 2020 counts, City staff are requesting that a compounded annual growth factor of 1% be applied to historical count data (i.e., any count that is more than one year old). Accordingly, a 1% annual growth factor was applied to the turning movement counts provided by City staff for this project.
- **Background Conditions.** Background traffic volumes were estimated by adding to existing peak hour volumes the projected volumes from approved but not yet completed developments. The added traffic from approved but not yet completed developments was provided by the City of San Jose in the form of the Approved Trips Inventory (ATI). Background conditions represent the baseline conditions to which project conditions are compared for the purpose of determining potential adverse operational effects of the project. The ATI sheets are contained in Appendix B.
- **Background Plus Project Conditions.** Background plus project conditions reflect projected traffic volumes on the planned roadway network with completion of the project and approved developments. Background plus project traffic volumes were estimated by adding to background traffic volumes the additional traffic generated by the project.

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

Intersection Operations Analysis Methodology

This section presents the methods used to determine the traffic conditions at the study intersections and the potential adverse operational effects due to the project. It includes descriptions of the data requirements, the analysis methodologies, the applicable intersection level of service standards, and the criteria used to determine adverse effects on intersection operations.

Data Requirements

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

- existing traffic volumes
- existing lane configurations
- signal timing and phasing
- a list of approved projects

Intersection Level of Service Standards and Analysis Methodologies

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

Signalized Intersections

The signalized study intersections are subject to the City of San Jose's level of service standards. The City of San Jose level of service methodology is TRAFFIX, which is based on the 2000 *Highway Capacity Manual* (HCM) method for signalized intersections. TRAFFIX evaluates signalized intersection operations on the basis of average delay time for all vehicles at the intersection. Since TRAFFIX is also the CMP-designated intersection level of service methodology, the City of San Jose methodology employs the CMP defaults values for the analysis parameters. The City of San Jose level of service standard for signalized intersections is LOS D or better. The correlation between average delay and level of service is shown in Table 1.

Adverse Intersection Operations Effects

According to the City of San Jose's *Transportation Analysis Handbook, 2018*, an adverse effect on intersection operations would occur if for either peak hour:

1. The level of service at the intersection degrades from an acceptable level (LOS D or better) under background conditions to an unacceptable level under background plus project conditions, or
2. The level of service at the intersection is an unacceptable level (LOS E or F) under background conditions and the addition of project trips cause 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 (.01) or more.

The exception to this threshold is when the addition of project traffic reduces the amount of average control delay for critical movements, i.e., the change in average control delay for critical movements are negative. In this case, the threshold is when the project increases the critical v/c value by 0.01 or more.

Adverse effects at signalized intersections can be addressed by one of the following approaches:

- Construct improvements to the subject intersection or other roadway segments of the citywide transportation system to increase overall capacity, or

- Reduce project-generated vehicle trips (e.g., implement a “trip cap”) to eliminate the adverse operational effects and restore intersection operations to background conditions. The extent of trip reduction should be set at a level that is realistically attainable through proven methods of reducing trips.

Table 1
Signalized Intersection of Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	up to 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.1 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to oversaturation, poor progression, or very long cycle lengths.	Greater than 80.0

Source: Transportation Research Board, *2010 Highway Capacity Manual*, (Washington, D.C., 2010).

Intersection Vehicle Queuing Analysis

The analysis of intersection operations is typically supplemented with a vehicle queuing analysis if the project would add 10 peak hour vehicle trips or more per lane to any left-turn movement at a signalized intersection. Based on the project trip assignment and due to the relatively small size of the project, the project would not add 10 peak hour trips or more per lane to any left-turn movement. In fact, the project would not add 5 peak hour trips or more per lane to any left-turn movement at a study intersection. For this reason, none of the study intersections were evaluated for potential queuing issues.

Report Organization

This report has a total of five chapters. Chapter 2 describes the existing roadway network, transit service, bicycle and pedestrian facilities. Chapter 3 presents the cumulative CEQA analysis, which evaluates the project’s consistency with the Envision San Jose 2040 General Plan. Chapter 4 describes the local transportation analysis including the method by which project traffic is estimated, intersection level of service analysis for existing, background, and background plus project conditions, a site access and on-site circulation review, effects on bicycle, pedestrian, and transit facilities, and a parking evaluation. Chapter 5 presents the conclusions of the local transportation analysis.

2. Existing Conditions

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

Existing Roadway Network

Regional access to the project site is provided via US 101 and I-680. Local access to the site is provided by Alum Rock Avenue, Capitol Avenue and White Road. These roadways are described below.

US 101 is an eight-lane freeway (three mixed-flow lanes and one HOV lane in each direction) in the vicinity of the site. US 101 extends northward through San Francisco and southward through Gilroy. Access to and from the site is provided via the Santa Clara Street/Alum Rock Avenue interchange.

I-680 is a north-south freeway that begins at US 101 in San Jose, where I-280 transitions to I-680, and ends at I-80 in Solano County. I-680 provides access to the project site via the Alum Rock Avenue interchange. The section of I-680 in the project vicinity is an eight-lane freeway, with four mixed-flow lanes in both directions.

Alum Rock Avenue is an east-west oriented Grand Boulevard that extends from US 101 to Alum Rock Park near the foothills in East San Jose with interchanges at US 101 and at I-680. Alum Rock Avenue is a Vision Zero Corridor, which is a commitment to prioritizing street safety and ensuring all road users – whether walking, biking, riding transit, or driving – are safe. Alum Rock Avenue has a posted speed limit of 30 mph and is a four-lane road with a two-way center left-turn lane adjacent to the project site. West of the I-680 interchange, Alum Rock Avenue consists of four travel lanes with median transit lanes (i.e., BRT service). Alum Rock Avenue has sidewalks on both sides of the street but has no bike lanes. Curb parking (with a two-hour time limit) is allowed along Alum Rock Avenue in the project area. West of US 101, Alum Rock Avenue becomes Santa Clara Street and extends westward through Downtown San Jose. Alum Rock Avenue provides direct access to the project site.

Capitol Avenue is a Grand Boulevard that begins at Capitol Expressway and extends north into Milpitas where it transitions into Great Mall Parkway at Montague Expressway. Capitol Avenue consists of four travel lanes with LRT trains operating within the median. Capitol Avenue has sidewalks and striped bike lanes on both sides of the street and has a posted speed limit of 35 mph in the study area. Capitol Avenue provides access to the project site via Alum Rock Avenue.

White Road is a north/south four-lane undivided City Connector Street with sidewalks and striped bike lanes on both sides of the street. To the north, White Road becomes Piedmont Road at its intersection with Penitencia Creek Road. To the south, White Road becomes San Felipe Road at its intersection with Aborn Road. Curb parking is allowed along most segments of White Road on one side or the other. White Road has a posted speed limit of 35 mph. White Road provides access to the project site via Alum Rock Avenue.

Existing Pedestrian, Bicycle, and Transit Facilities

San Jose desires to provide a safe, efficient, fiscally, economically, and environmentally sensitive transportation system that balances the needs of bicyclists, pedestrians, and public transit riders with those of automobiles and trucks. The existing pedestrian, bicycle, and transit facilities in the study area are described below.

Existing Pedestrian Facilities

Pedestrian facilities in the project area consist primarily of sidewalks along streets and crosswalks with pedestrian signal heads at intersections. A mid-block unsignalized crosswalk with signage and rectangular rapid flashing beacons (RRFBs) is provided on Alum Rock Avenue at James Lick High School approximately 500 feet east of the project site. Sidewalks are found along all previously described local roadways in the study area.

The existing network of sidewalks and crosswalks provides good connectivity for pedestrians between the project site and other surrounding land uses and transit stops. Crosswalks with pedestrian signal heads and push buttons are located at all the signalized intersections in the study area. Curb ramps are also provided at all the signalized intersections in the study area. However, the curb ramps at the Capitol Avenue/Alum Rock Avenue intersection are missing truncated domes and do not meet current ADA standards. Truncated domes are the standard design requirement for detectable warnings which enable people with visual disabilities to determine the boundary between the sidewalk and the street.

Existing Bicycle Facilities

Bicycle facilities in the study area include striped bike lanes (Class II bicycle facilities), as shown on Figure 3. Bike lanes are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Striped bike lanes are provided on Capitol Avenue and White Road along their entirety. Alum Rock Avenue is a Grand Boulevard with no bicycle facilities. Thus, bicyclists should ride with caution on this street.

Existing Transit Services

Existing transit service to the study area is provided by the VTA (see Figure 4). Five bus routes provide service to the study area. All the VTA bus routes within the project vicinity and their headways are summarized in Table 2.

The bus stops closest to the project site are located on Alum Rock Avenue at Pleasant Ridge Avenue approximately 250 feet west of the project site, and at James Lick High School about 400 feet east of the site. These bus stops are served by Route 25, which provides service to the Alum Rock LRT Station located less than ½-mile south of the project site. The Alum Rock Station is served by the Orange Line, which provides LRT service between the Alum Rock Station and downtown Mountain View. The Orange Line serves 26 LRT stations in the cities of San Jose, Milpitas, Santa Clara, Sunnyvale and Mountain View.

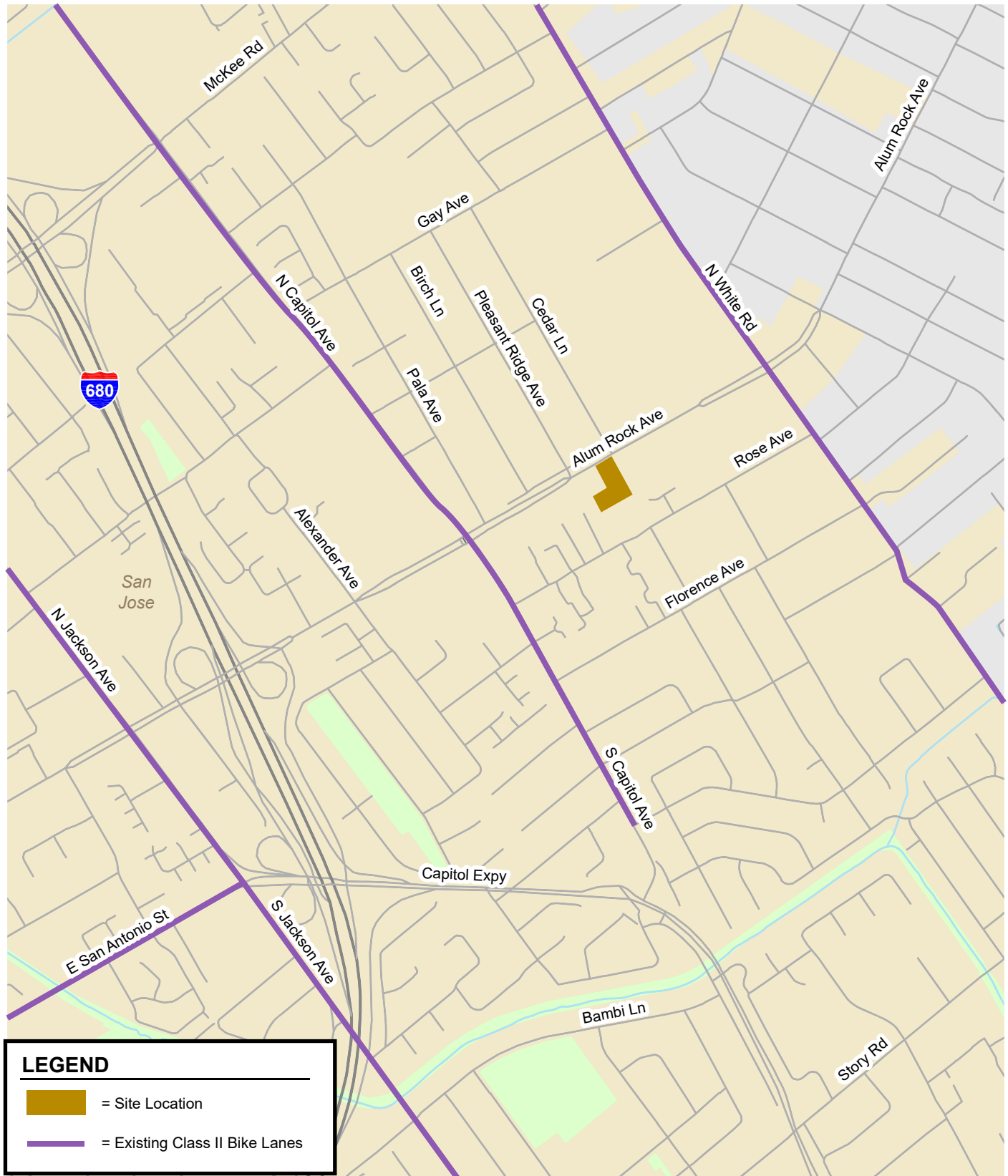


Figure 3
Existing Bicycle Facilities



Figure 4
Existing Transit Services

Pedestrian access to the closest bus stop (Pleasant Ride Avenue stop) on westbound Alum Rock Avenue is provided via a frontage road on the north side of Alum Rock Avenue. There is no sidewalk along the south side of the frontage road/north side of Alum Rock Avenue providing access to this bus stop. On the other hand, the westbound bus stop in front of James Lick High School is easily accessible via the mid-block crosswalk on Alum Rock Avenue.

Table 2
Existing Bus Service

Bus Route	Route Description	Headway ¹
Local Route 23	De Anza College to Alum Rock LRT Station	15 min
Local Route 25	De Anza College to Alum Rock LRT Station	15 min
Local Route 70	Milpitas BART Station to Eastridge Mall	20 min
Local Route 71	Milpitas BART Station to Capitol Station	30 min
Bus Rapid Transit 522	Palo Alto Transit Center to Eastridge Mall	15 - 20 min
Notes: ¹ Approximate headways during peak weekday commute periods.		

Existing Intersection Lane Configurations

The existing lane configurations at the study intersections were provided by City of San Jose staff and verified by observations in the field (see Figure 5).

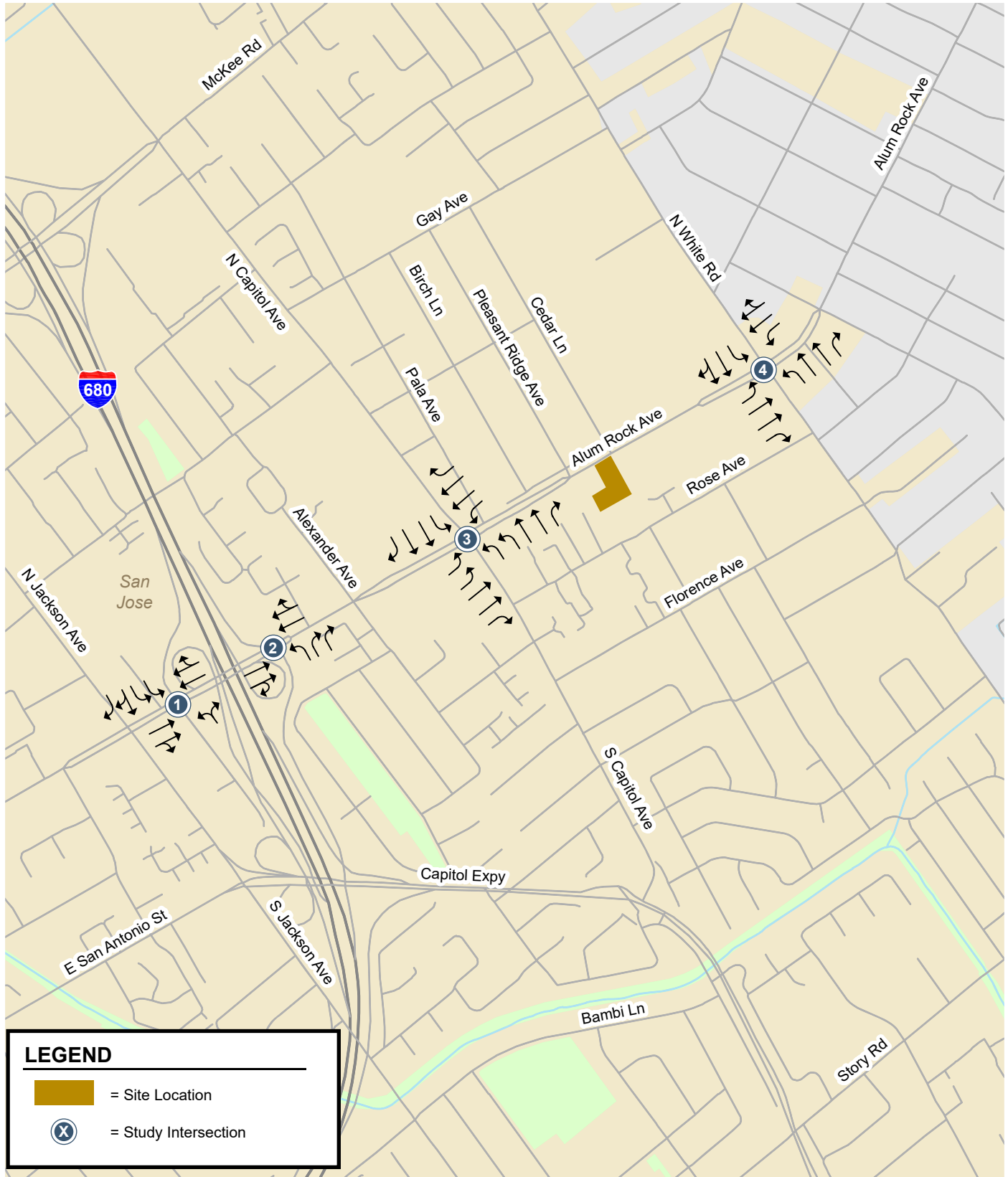


Figure 5
Existing Intersection Lane Configurations

3.

Cumulative CEQA Analysis

This chapter presents the cumulative CEQA transportation analysis, which determines the project's consistency with the Envision San Jose 2040 General Plan. Factors that contribute to a determination of consistency with the City's General Plan include the project's density, design, and conformance to the General Plan goals and policies. If a project is determined to be inconsistent with the General Plan, a cumulative impact analysis is required per the City's *Transportation Analysis Handbook*.

Project Consistency with the General Plan

The project site is designated Neighborhood Community Commercial in the Envision San Jose 2040 General Plan. Residential uses are generally not allowed in this land use designation. However, since the project site is located within the Alum Rock Avenue East Urban Village, a Horizon 1 future Urban Village, and includes 100% affordable residential units, the project is allowed to move ahead of the adoption of the future Urban Village Plan under General Plan Implementation Policy 5.12 (IP-5.12). Therefore, the project conforms to the current General Plan and would not require a General Plan Amendment.

Urban Villages are one of the twelve Major Strategies identified in the General Plan and are intended to accommodate higher density housing and job growth. The Urban Village designation allows for a density of up to 250 dwelling units per acre (DU/AC) and a floor area ratio (FAR) of up to 10.0. As proposed, the 164-unit residential project would have a density of approximately 125 DU/AC as follows: 164 Dwelling Units / 1.32 Acres = 125 DU/AC (rounded up). Therefore, the project development density is consistent with the planned Urban Village. In addition, since the project would include 7,500 s.f. of retail space, the project would add jobs to the area.

Project Design and Characteristics

- The residential mixed-use project would be located within walking distance (approximately 250 feet) of a bus stop, which would contribute toward the following:
 - Increase in the proportion of commute travel using modes other than the single-occupant vehicle (SOV);
 - Increase in daily transit ridership in the area; and
 - Provide environmental benefits to the community due to the project's proximity to transit.
- The project would be integrated with the City's transportation system, including transit, roads, and pedestrian facilities.
- The project would be located in an area consisting of a mix of households and jobs (Alum Rock Avenue East Urban Village), which would provide new residents with the opportunity to live and work in the same community.

- The project would not negatively impact existing transit, bicycle or pedestrian infrastructure.

Conformance to the General Plan Goals and Policies

- The project would not conflict with any applicable land use plans, policies, or regulations.
- The project would not conflict with any adopted plans or policies for new transit, bicycle or pedestrian facilities.

The high density affordable residential mixed-use project is located in a Planned Growth Area (PGA) with low VMT and high-quality transit. Therefore, the project would be considered part of the cumulative solution to meet the General Plan's long-range transportation goals and would result in a less-than-significant cumulative impact.

4.

Local Transportation Analysis

This chapter describes the local transportation analysis including the method by which project traffic is estimated, intersection operations analysis, any adverse intersection traffic effects caused by the project, site access and on-site circulation review, effects on bicycle and pedestrian facilities, effects on transit services, and parking.

Intersection Operations Analysis

The intersection operations analysis is intended to quantify the operations of intersections in the project vicinity and to identify potential adverse effects due to the addition of project traffic. Information required for the intersection operations analysis related to project trip generation, trip distribution, and trip assignment are presented in this section. The study intersections are located in the City of San Jose and are evaluated based on the City of San Jose's intersection analysis methodology and standards in determining potential adverse operational effects due to the project, as described in Chapter 1.

Project Trip Estimates

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

Trip Generation

Through empirical research, data have been collected that quantify the amount of traffic produced by many types of land uses. This research is compiled in the *Trip Generation Manual, 10th Edition* (2017) published by the Institute of Transportation Engineers (ITE). The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates by the size of the development.

Trips that would be generated by the proposed residential mixed-use project were estimated using the ITE average trip rates for "Multifamily Housing Mid-Rise" (ITE Land Use 221) and "Shopping Center" (ITE Land Use 820) located in a General Urban/Suburban setting. The "Multifamily Housing Mid-Rise" ITE land use category includes apartment, townhouse and condominium developments with a total of at least four (4) dwelling units and that have between three (3) and ten (10) levels. The project as proposed includes five stories of residential units over one story of ground level parking. The ITE rates for Shopping Center are commonly used for projects such as this if the specific retail land uses are not

known at the time the traffic study is being prepared, since shopping centers typically contain a wide range of retail land uses.

Trip Adjustments and Reductions

In accordance with San Jose's *Transportation Analysis Handbook* (April 2018, Section 4.8, "Intersection Operations Analysis"), the project is eligible for adjustments and reductions from the baseline trip generation described above. The applicable trip adjustments and reductions are described below.

Internal Mixed-Use Trip Reduction

In accordance with VTA's *Transportation Impact Analysis Guidelines* (October 2014, Section 8.2.1, "Standard Trip Reductions"), a 15% residential/retail mixed-use trip reduction can be applied to account for the internalization of trips between the two land uses. The 15% reduction is first applied to the smaller trip generator (retail use). The same number of trips are then subtracted from the larger trip generator (residential use) to account for both internal trip ends.

Location-Based Trip Adjustment

Based on the 2018 San Jose guidelines, the project qualifies for a location-based adjustment. The location-based adjustment reflects the project's vehicle mode share based on the "place type" in which the project is located per the San Jose Travel Demand Model. The project's place type was obtained from the San Jose VMT Evaluation Tool. Based on the tool, the project site is located within the place type "Suburban with Multifamily Housing". Therefore, the baseline project trips were adjusted to reflect this place type's mode share. Residential and retail developments within Suburban with Multifamily Housing areas have a vehicle mode share of 88% (per Table 6 of the City's *Transportation Analysis Handbook*). Thus, a 12% reduction was applied to the project trip generation estimates based on the location-based vehicle mode share outputs produced from the Travel Demand Model. The 12% trip reduction is based on the percent of mode share for other modes of travel besides motor vehicles. The VMT Evaluation Tool Summary Report is contained in Appendix C.

Project-Specific Residential Trip Reduction

According to the *Transportation Analysis Handbook*, the VMT reduction resulting from implementing the standard and proposed VMT reduction strategies (Tiers 1 - 4) in the evaluation tool should be included as part of the trip generation estimates. The standard Tier 1 VMT reduction strategies include the following project specific characteristics: Increase Residential Density, Increase Employment Density, and Integrate Affordable and Below Market Rate units. The VMT Evaluation Tool calculated a 10% external trip reduction based on these project specific VMT reduction strategies.

Retail Pass-By Trip Reduction

A pass-by trip reduction can be applied to the net peak hour trip generation estimates for the proposed retail space. Pass-by-trips are trips that would already be on the adjacent roadways (and so are already counted in the background traffic) but would turn into the site while passing by. Justification for applying the pass-by-trip reduction is founded on the observation that such retail traffic is not actually generated by the retail use but is already part of the ambient traffic levels. A PM peak hour pass-by trip reduction of 34% was applied to the proposed retail space based on the ITE *Trip Generation Handbook* (Third Edition) for the Shopping Center land use. No AM peak hour pass-by trip reduction is provided for in the handbook. A daily pass-by trip reduction of 17% was calculated based on the average of the AM (0%) and PM (34%) pass-by trip reduction percentages.

Net Project Trips

After applying the ITE trip rates and applicable trip adjustments and reductions described above, the proposed project is estimated to generate 849 new daily vehicle trips, with 51 new trips (15 inbound and 36 outbound) occurring during the AM peak hour and 68 new trips (40 inbound and 28 outbound) occurring during the PM peak hour (see Table 3). Note that trip credits due to removal of the existing 8,200 s.f. commercial building on the site were not applied because the building is currently vacant.

Table 3
Project Trip Generation Estimates

Land Use	Size	Daily Rate	Daily Trips	AM Peak Hour				PM Peak Hour			
				Pk-Hr Rate	In	Out	Total	Pk-Hr Rate	In	Out	Total
<u>Proposed Uses</u>											
Apartments ¹	164 DU	5.44	892	0.36	16	43	59	0.44	44	28	72
<i>Residential & Retail Internal Capture (15%)</i> ³			(42)		0	(1)	(1)		(2)	(2)	(4)
<i>Location-Based Vehicle Mode Share (12%)</i> ⁴			(102)		(2)	(5)	(7)		(5)	(3)	(8)
<i>Project-Specific Trip Reduction (10%)</i> ⁵			(75)		(1)	(4)	(5)		(4)	(2)	(6)
Residential Subtotal:			673		13	33	46		33	21	54
Retail ²	7,500 s.f.	37.75	283	0.94	4	3	7	3.81	14	15	29
<i>Residential & Retail Internal Capture (15%)</i> ³			(42)		(1)	0	(1)		(2)	(2)	(4)
<i>Location-Based Vehicle Mode Share (12%)</i> ⁴			(29)		(1)	0	(1)		(1)	(2)	(3)
<i>Retail Pass-By External Trip Reduction</i> ⁶			(36)		0	0	0		(4)	(4)	(8)
Retail Subtotal:			176		2	3	5		7	7	14
Net New Trips:			849		15	36	51		40	28	68
Notes:											
¹ Trip generation based on average rates contained in the <i>ITE Trip Generation Manual, 10th Edition</i> , for Multifamily Housing Mid-Rise (Land Use 221) located in a General Urban/Suburban setting. Rates are expressed in trips per dwelling unit (DU).											
² Trip generation based on average rates contained in the <i>ITE Trip Generation Manual, 10th Edition</i> , for Shopping Center (Land Use 820) located in a General Urban/Suburban setting. Rates are expressed in trips per 1,000 square feet (s.f.).											
³ A 15% residential/retail internal mixed-use trip reduction was applied to the project per the 2014 Santa Clara VTA TIA Guidelines. The 15% reduction was first applied to the smaller generator (retail). The same number of trips were subtracted from the larger generator (residential) to account for both trip ends.											
⁴ A 12% reduction for the residential and retail components of the project was applied based on the location-based vehicle mode share percentage outputs (Table 6 of the City's <i>Transportation Analysis Handbook</i>) produced from the San Jose Travel Demand Model for the place type: Suburban with Multifamily Housing.											
⁵ A 10% reduction for the residential component of the project was applied based on the external trip adjustments obtained from the City's VMT Evaluation Tool.											
⁶ The PM peak hour pass-by trip reduction percentage (34% for Shopping Center) was based on the ITE Trip Generation Handbook (Third Edition). There is no AM peak hour pass-by trip reduction. The daily pass-by trip reduction (17%) was calculated based on the average of the AM and PM pass-by trip reduction percentages.											

Trip Distribution and Assignment

The residential and retail trip distribution patterns for the project were estimated based on existing travel patterns on the surrounding roadway network that reflect typical weekday AM and PM peak commute patterns, the locations of complementary land uses, previous traffic studies in the area (including the nearby Villa Del Sol residential mixed-use development on Alum Rock Avenue), and freeway access points. The peak hour vehicle trips generated by the project were assigned to the roadway network in accordance with the trip distribution patterns for each land use.

Figure 6 shows the residential project trip distribution pattern and trip assignment. Figure 7 shows the trip distribution pattern and trip assignment for the retail component of the project. The total project trip assignment is shown on Figure 8.

2880 Alum Rock Avenue LTA

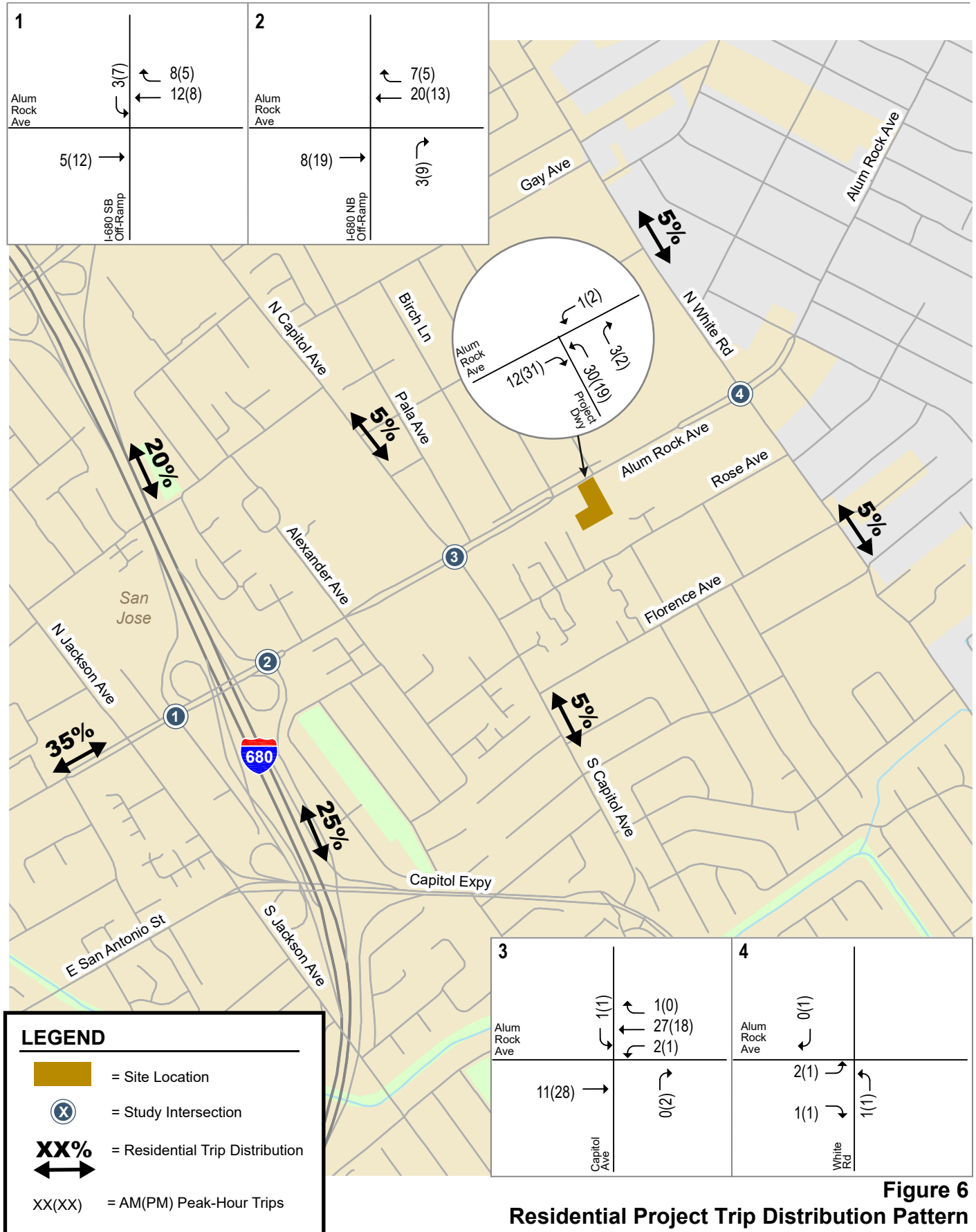


Figure 6
Residential Project Trip Distribution Pattern and Trip Assignment

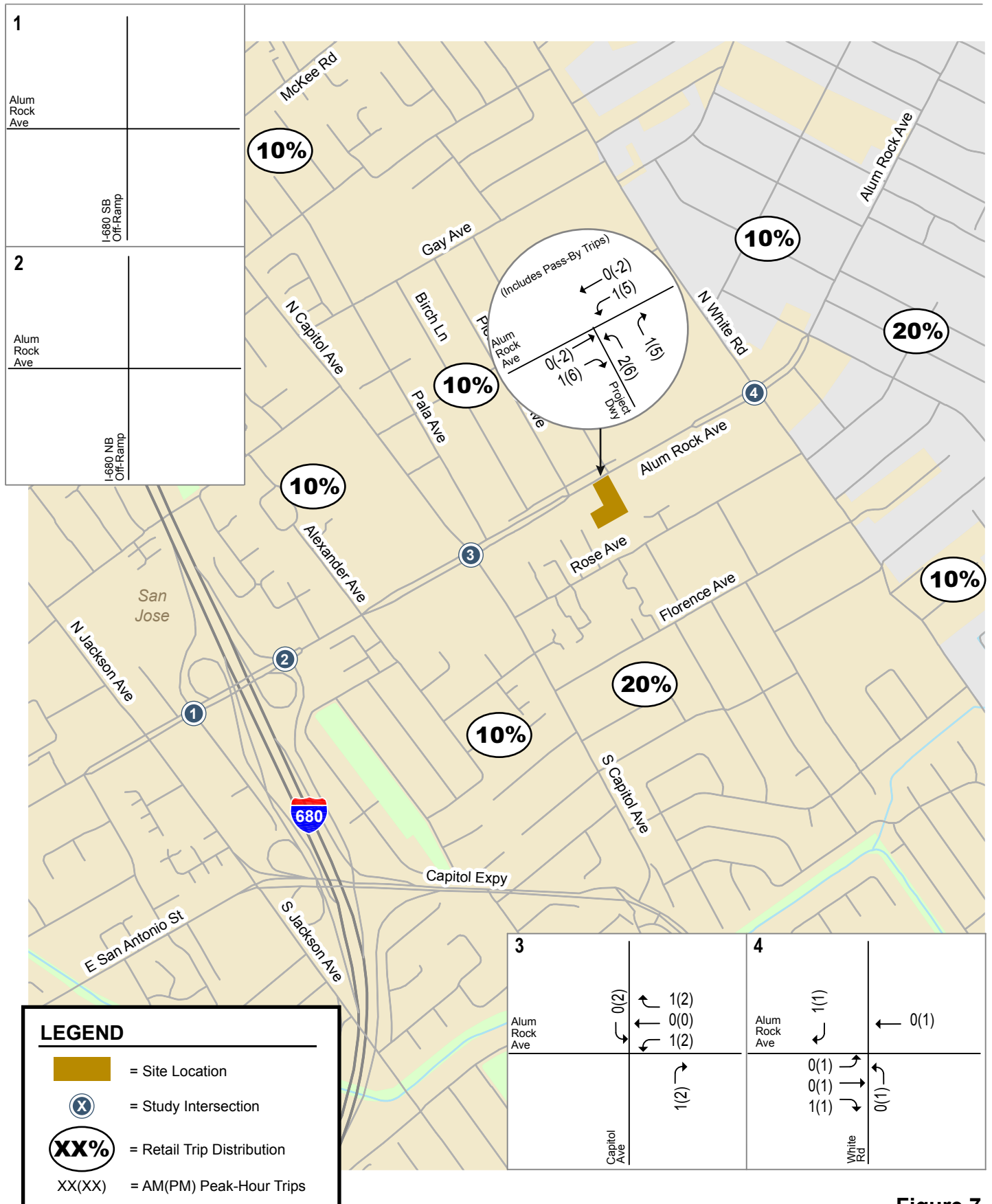


Figure 7
Retail Project Trip Distribution Pattern and Trip Assignment

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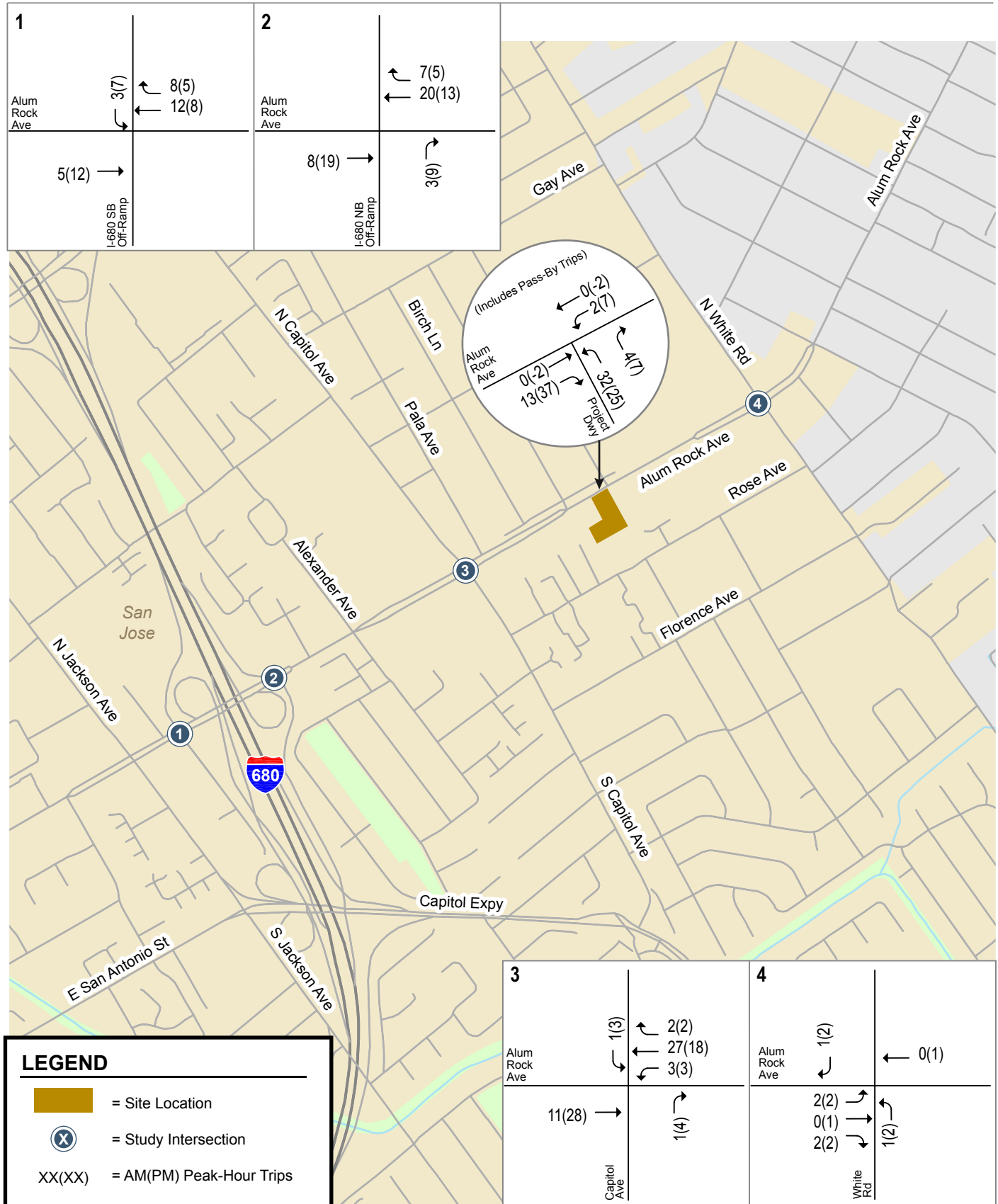


Figure 8
Total Project Trip Assignment

Traffic Volumes Under All Scenarios

Existing Traffic Volumes

Since the institution of shelter-in-place orders due to the COVID-19 pandemic, most businesses and schools are closed, and people are working at home to the extent possible. As a result, existing traffic volume is a fraction of what it was prior to the virus outbreak. It is not known when traffic levels will return to pre-virus conditions, since many people may be unemployed for an extended period of time. Even though some businesses are open, people with health concerns may be reluctant to venture outside their homes. As a result, traffic volume is expected to remain reduced for many months.

In response to the current situation, the City of San Jose is requiring that all new traffic counts for study intersections be put on hold until further notice. Instead of conducting new counts, City staff are requesting that an annual growth factor of 1% be applied to historical count data (i.e., counts that are more than one year old). In Hexagon's experience, this is a typical annual growth factor. Accordingly, a 1% annual growth factor was applied to the turning movement counts provided by the City of San Jose Public Works Department for this project. The existing traffic volumes are shown on Figure 9.

Background Traffic Volumes

Background AM and PM peak hour traffic volumes were estimated by adding to existing traffic volumes the trips generated by nearby approved but not yet completed or occupied projects (see Figure 10). The approved projects are listed as part of the Approved Trips Inventory (ATI) contained in Appendix B.

Background Plus Project Traffic Volumes

Project trips were added to background traffic volumes to obtain background plus project traffic volumes (see Figure 11). Traffic volumes for all traffic scenarios are tabulated in Appendix A.

Intersection Traffic Operations

Signalized intersection levels of service were evaluated against the standards of the City of San Jose. The results of the analysis show that the signalized study intersections are currently operating at an acceptable level of service (LOS D or better) during both the AM and PM peak hours of traffic and would continue to do so under background and background plus project conditions (see Table 4). The detailed intersection level of service calculation sheets are included in Appendix D.

Table 4
Signalized Intersection Level of Service Summary

ID	Signalized Intersection	Peak Hour	Count Date	Existing		Background		Background Plus Project			
				Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Avg. Delay (sec)	LOS	Incr. In Crit. Delay (sec)	Incr. In Crit. V/C
1	I-680 SB Off-Ramp & Alum Rock Av *	AM	12/07/17	22.8	C	22.8	C	22.7	C	-0.1	0.001
		PM	12/13/18	23.4	C	23.4	C	23.3	C	-0.1	0.003
2	I-680 NB Off-Ramp & Alum Rock Av *	AM	12/07/17	17.2	B	17.3	B	17.3	B	0.0	0.006
		PM	12/18/18	23.3	C	23.3	C	23.4	C	0.1	0.006
3	Capitol Av & Alum Rock Av *	AM	09/25/18	35.2	D	35.4	D	35.5	D	0.0	0.008
		PM	12/13/18	36.2	D	36.5	D	36.5	D	0.2	0.010
4	White Rd & Alum Rock Av *	AM	09/25/18	45.7	D	46.4	D	46.5	D	0.1	0.002
		PM	12/13/18	44.9	D	46.2	D	46.3	D	0.2	0.003
<u>Notes:</u> * Denotes a CMP intersection											

2880 Alum Rock Avenue LTA

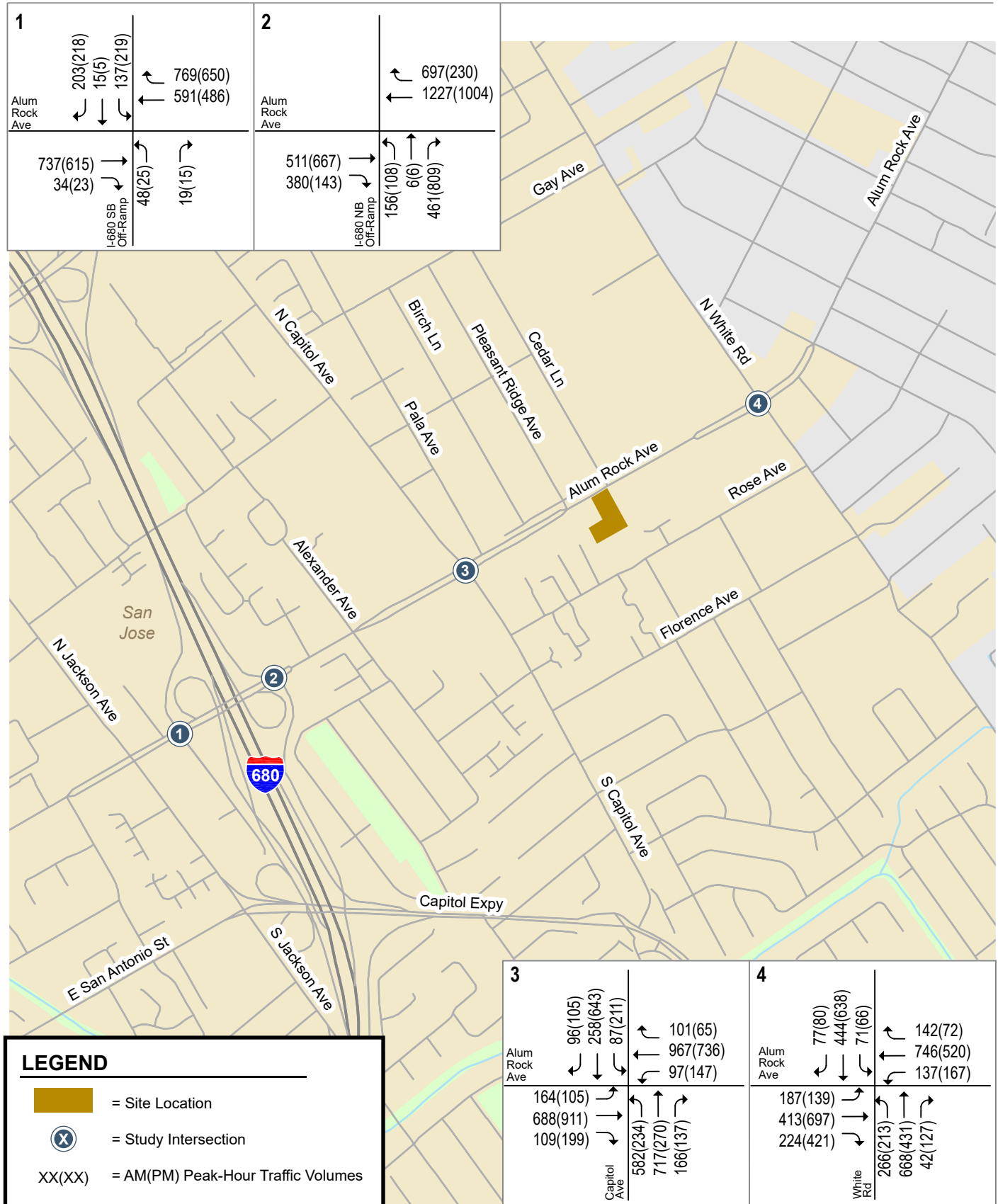


Figure 9
Existing Traffic Volumes

2880 Alum Rock Avenue LTA

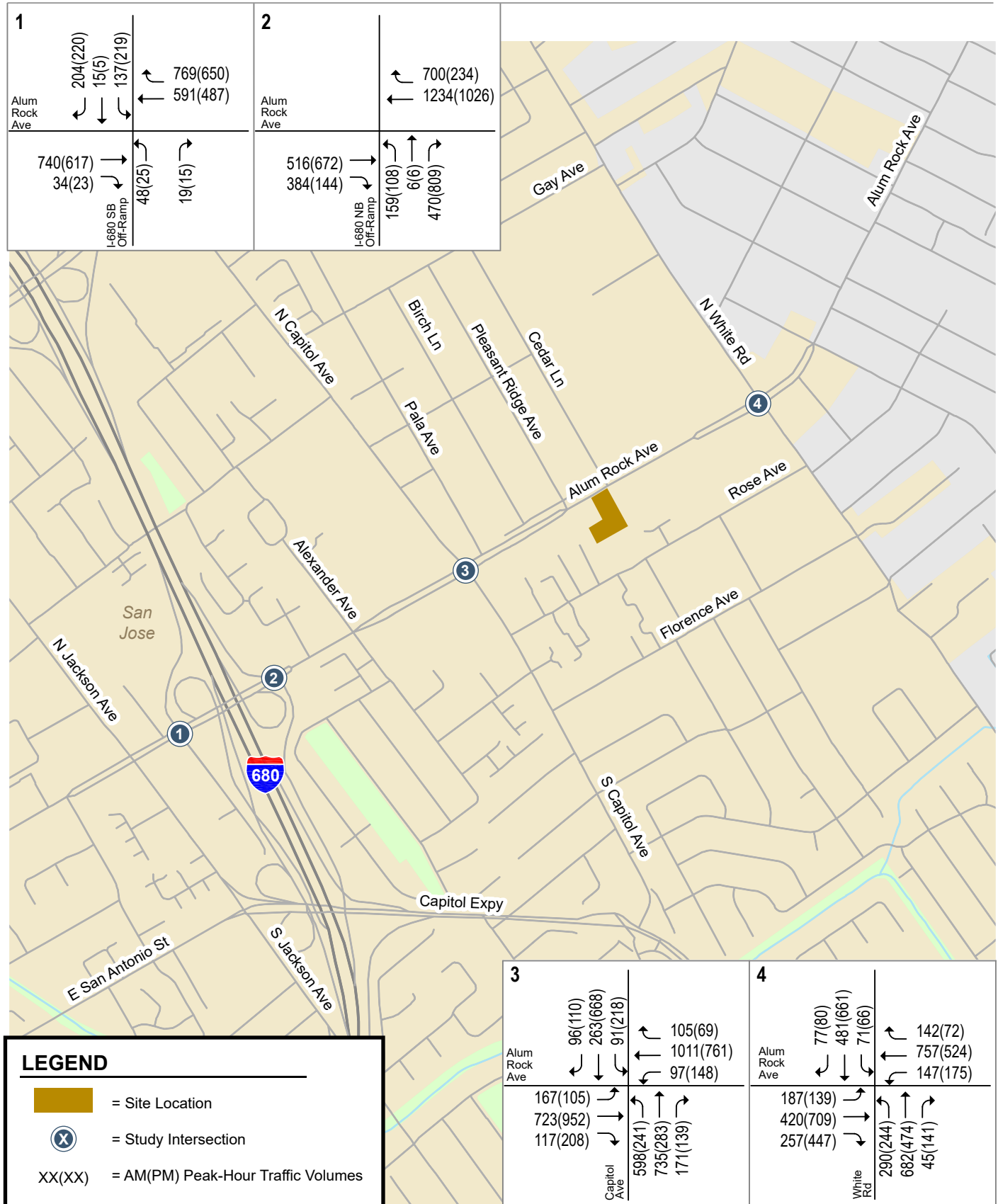


Figure 10
Background Traffic Volumes

2880 Alum Rock Avenue LTA

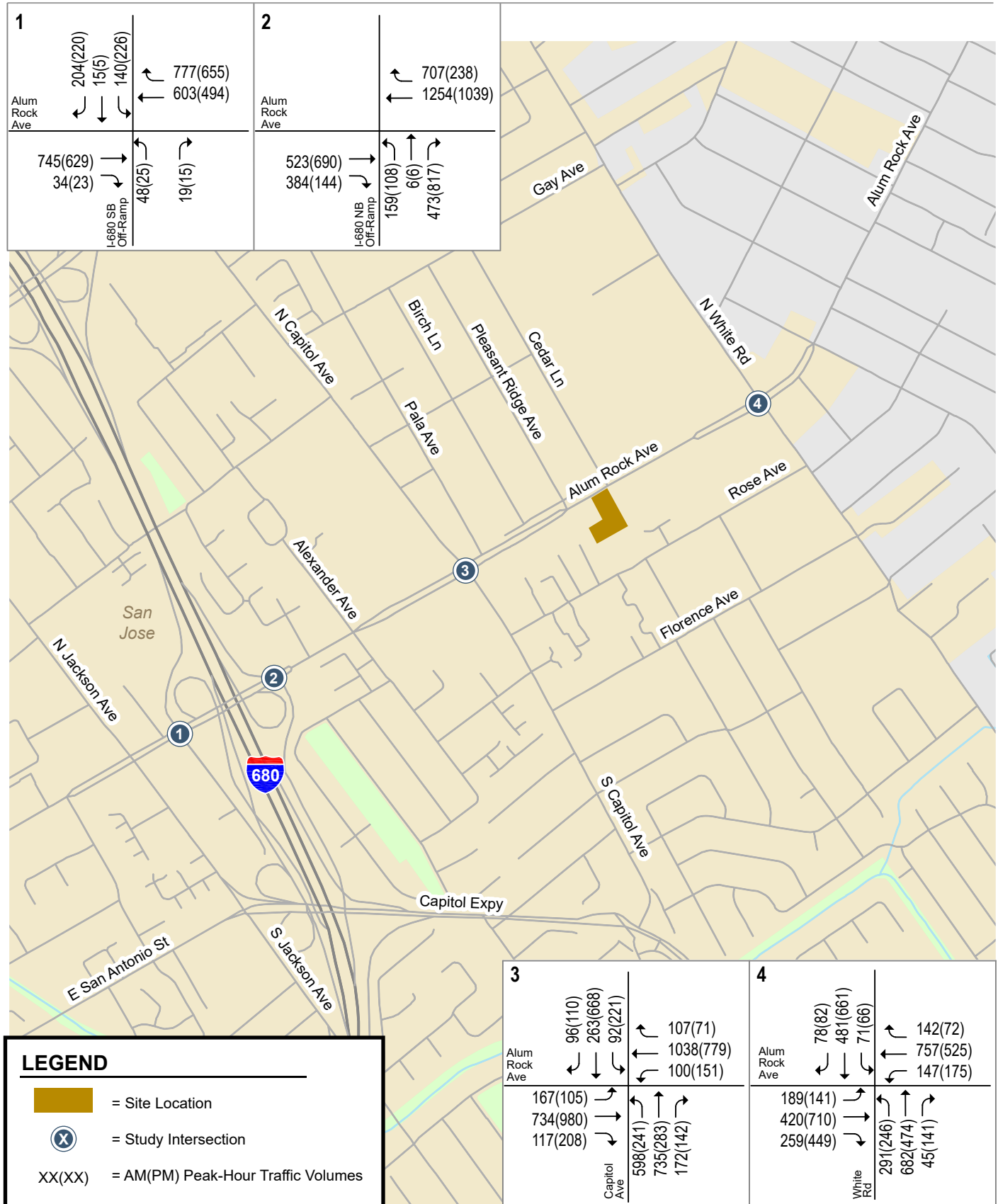


Figure 11
Background Plus Project Traffic Volumes

Vehicular Access and Circulation

The site access and circulation evaluation is based on the March 24, 2021 site plan prepared by AO Architects (see Figure 2 in Chapter 1). Site access was evaluated to determine the adequacy of the site's driveway with regard to the following: traffic volume, geometric design, sight distance and general operations. On-site vehicular circulation was reviewed in accordance with generally accepted traffic engineering standards and City design standards.

Site Access

Site access to the project would be provided via one existing full-access driveway on Alum Rock Avenue that would serve both the residential and retail components of the project. The 26-foot-wide driveway would continue to be shared with the adjacent property. The two-way center left-turn lane would continue to allow for left turns to and from the driveway. According to the City of San Jose Department of Transportation (DOT) Geometric Design Guidelines, the standard width for a two-way driveway that serves a multi-family residential development is 26 feet wide, measured at the throat. According to the site plan, the project driveway on Alum Rock Avenue and the on-site drive aisles would be 26 feet wide.

According to the site plan, the on-site drive aisle would have a hammerhead configuration at the back (south end) of the site. The drive aisle would provide access to 61 surface parking stalls (open parking) and the secure parking garages serving residents of Building A and Building B.

Project Driveway Volumes and Operations

The total project-generated trips that are estimated to occur at the project driveway on Alum Rock Avenue are 15 inbound trips and 36 outbound trips during the AM peak hour, and 44 inbound trips and 32 outbound trips during the PM peak hour (as shown previously on Figure 8).

Inbound Operations

The City typically requires developments to provide adequate stacking space for two inbound vehicles (40 to 50 feet) between the face of curb and any entry gates or on-site parking spaces. This prevents vehicles from queuing onto the street. Based on the site plan, there is about 20 feet between the face of curb and the first 90-degree parking stall. In order to provide approximately 40 feet of inbound vehicle stacking space at the driveway, two parking stalls would need to be removed.

Note that the number of inbound vehicle trips at this driveway would be relatively low (about 1 inbound vehicle every 4 minutes during the AM peak hour and about 1 inbound vehicle every 1 ½ minutes during the PM peak hour) and there would be no security gate at the driveway to impede the flow of inbound vehicles. Also, the proposed parking configuration (i.e., parking stalls situated close to the sidewalk) is consistent with other neighboring developments along Alum Rock Avenue. For these reasons and because operational issues due to inbound vehicle movements at the driveway are not expected to occur, removing these two parking stalls to increase the inbound vehicle stacking space would be unwarranted.

Outbound Operations

Vehicles exiting the site and turning left onto westbound Alum Rock Avenue would experience some delay since this movement generally would require gaps in both directions of travel. Although, a two-step merging process onto westbound Alum Rock Avenue would be possible by utilizing the existing two-way center left-turn lane. Vehicles turning right from the project driveway may also experience some delay since the outbound lane would be a shared left/right movement.

Note that while the outbound driveway volume would be lower during the PM peak hour than during the AM peak hour, the opposing traffic volume on eastbound Alum Rock Avenue would be higher during

the PM peak hour (approximately 1,300 vehicles) than during the AM peak hour (about 1,000 vehicles), resulting in a slightly higher outbound vehicle delay during the PM peak hour. Although drivers would experience some vehicle delay when exiting the project driveway during the peak traffic periods of the day, on-site vehicle queuing would be minimal (averaging only 1 or 2 vehicles in length) due to the low number of trips at the driveway.

Note that the traffic signals at Capitol Avenue to the west and White Road to the east create gaps in the flow of traffic along Alum Rock Avenue, which would help drivers to enter and exit the project driveway.

Sight Distance at the Alum Rock Avenue Driveway

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

No parking zones should be established immediately adjacent to the project driveway to ensure that exiting vehicles can see vehicles traveling along Alum Rock Avenue. There are no roadway curves or landscaping features shown on the site plan that would obstruct the vision of exiting drivers. However, short-term street parking is allowed on Alum Rock Avenue and could obstruct the view of exiting drivers if there were cars parked adjacent to the driveway. Standard red curbs should be implemented adjacent to the project driveway to ensure adequate sight distance is provided.

Recommendation: Include at least 6 feet of red curb on the west side of the project driveway on Alum Rock Avenue to ensure adequate sight distance is provided.

On-Site Circulation

According to the site plan, the main drive aisle and the drive aisles within both parking garages measure 26 feet wide. The City's standard width for two-way drive aisles is 26 feet wide where 90-degree parking is provided (*San Jose Municipal Code 20.90.100*). Thus, the project would meet the City's standard for drive aisle width.

Internal circulation was evaluated for vehicle access by the method of turning-movement templates. Analysis using the Passenger Car turning templates shows that small and large passenger vehicles (turning templates "Pm" and "P", respectively) could adequately negotiate through the site and access the surface parking spaces and garage spaces. However, some drivers may have difficulty backing out of the two parking spaces located at the southeast and southwest corners of the surface parking lot. The site plan shows the main drive aisle would dead-end at either end of the hammerhead configuration, and additional turnaround space would not be provided. Thus, multi-point maneuvers would be required when either backing out of these spaces or discovering that no parking is available upon reaching the end of the drive aisle, requiring drivers to turn around.

Recommendation: Provide adequate space for vehicles to turn around at each end of the main drive aisle.

The security gates at the parking garage entrances would keep retail patrons and guests from entering the secure residential parking garages. The drive aisles within both parking garages would dead-end but would likely not create any significant issues since only residents would be utilizing the garage spaces. However, there are four garage parking stalls with minor access issues as described below.

Residents using the parking stall situated adjacent to the commercial trash room within the Building A parking garage would have limited room to back up due to the placement of the three motorcycle

parking spaces within the crosshatched area. Accordingly, the motorcycle parking spaces should be relocated or reoriented if possible.

Recommendation: Either relocate or reorient the motorcycle parking spaces within the Building A parking garage to provide more backup room for residents using the parking stall situated adjacent to the commercial trash room; or assign this parking stall to a resident with a compact vehicle.

The two parking stalls located at the end of the drive aisle within the Building B parking garage would present access issues due to their placement. Residents using these two parking stalls would need to either back in or out of the stalls approximately 80 feet (length of the drive aisle within the Building B garage) or perform multi-point maneuvers within the garage. In addition, residents using the parking stall situated adjacent to the boiler room would have limited space to back up due to the placement of the two parking stalls at the end of the drive aisle. This parking stall should be assigned to a resident with a compact vehicle.

Recommendation: Assign the parking stall situated adjacent to the boiler room within the Building B parking garage to a resident with a compact vehicle.

Parking Stall Dimensions

The City of San Jose Off-Street Parking Design Standards for Full-Size Car Spaces and Compact Car Spaces require 90-degree parking stalls be a minimum of 9 feet wide by 18 feet long and 8 feet wide by 16 feet long, respectively. The site plan shows all the parking stalls, including EV stalls and ADA accessible stalls, would meet the City's requirements for parking stall dimensions. The ADA accessible stalls would include van accessibility, per ADA requirements.

Truck Access and Circulation

The project site plan was reviewed for truck access using truck turning-movement templates for a SU-30 truck type (single unit trucks), which represents small emergency vehicles, garbage trucks, and small to medium delivery and moving trucks. Based on the site plan configuration, adequate access would be provided for SU-30 type trucks to enter the site from Alum Rock Avenue, maneuver through the open surface parking areas, and exit back onto Alum Rock Avenue.

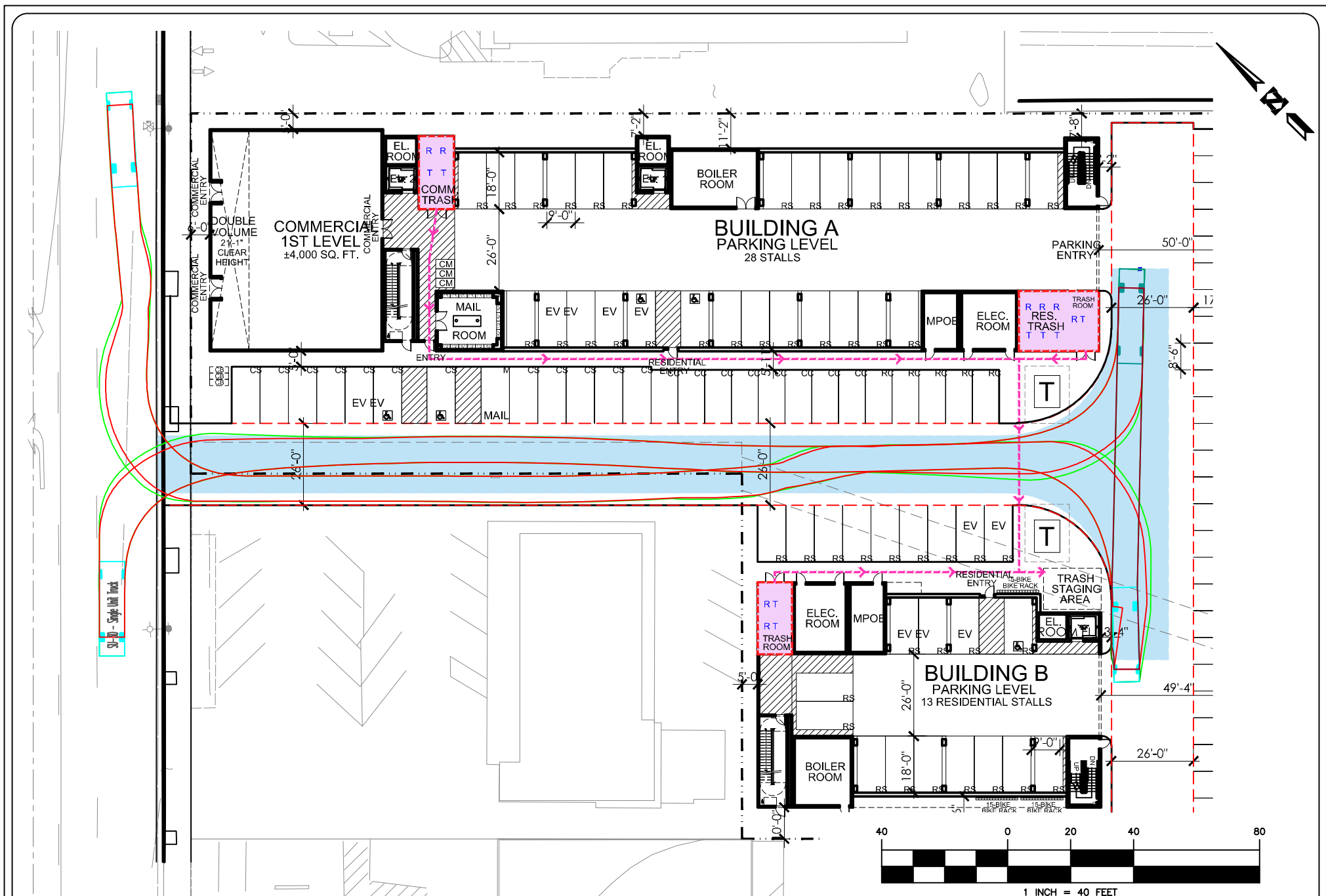
According to the site plan, the project is not proposing to provide an off-street freight loading space. The project should provide an on-site loading space for residential move-in/move-out and large deliveries, as well as freight loading for the commercial component of the project.

Recommendation: Provide at least one off-street loading space for residential move-in/move-out and commercial freight loading activities.

Garbage Collection

The site plan shows a trash room would be provided for each residential building as well as for the commercial space. Garbage and recycling bins would be provided at all three trash room locations. Additional trash bins/chutes, labeled "T" on Figure 12, would be provided at the southwest corner of Building A and Southeast corner of Building B. A single trash staging area would be located at the southeast corner of Building B, with access provided via the main drive aisle. The bins from all three trash rooms would be wheeled out to the trash staging area on garbage collection days (see Figure 12).

Garbage trucks require approximately 24 feet of overhead clearance to empty a bin over the truck. Since the trash bins would be accessed from outside the building, adequate vertical clearance would be provided for on-site garbage collection. The on-site hammerhead configuration would allow adequate access to the trash staging area, as shown on Figure 12. Since garbage collection would occur on site, traffic operations and parking along Alum Rock Avenue would not be affected during garbage collection activities.



DRAWN
T. CHANG

CHECKED
B. JACKSON

SCALE
1" = 40'

DATE 5/14/2021



HEXAGON TRANSPORTATION
CONSULTANTS, INC.

4 North Second Street, Suite 400
San Jose, California 95113
Ph: (408) 971-6100 www.hextrans.com

CITY OF SAN JOSE

2880 ALUM ROCK AVENUE
TURNING TEMPLATE

FIGURE NO.

12

Emergency Vehicle Access

Emergency vehicle access (EVA) to the site would be provided via Alum Rock Avenue. The project driveway and drive aisles would be adequately wide and would comply with the City's fire code. Adequate vertical clearance also would be provided on-site for emergency vehicles. The City of San Jose Fire Department requires that all portions of the buildings be within 150 feet of a fire department access road and requires a minimum of 13 feet 6 inches of vertical clearance. According to the site plan, the project would meet these fire access requirements.

Pedestrian, Bicycle and Transit Facilities

All new development projects in San Jose should encourage multi-modal travel, consistent with the goals of the City's General Plan. It is the goal of the General Plan that all development projects accommodate and encourage the use of non-automobile transportation modes to achieve San Jose's mobility goals and reduce vehicle trip generation and vehicle miles traveled. In addition, the adopted City Bike Master Plan establishes goals, policies and actions to make bicycling a daily part of life in San Jose. The Master Plan includes designated bike lanes along many City streets, as well as on designated bike corridors. In order to further the goals of the City, pedestrian and bicycle facilities should be encouraged with new development projects.

Pedestrian Facilities

Pedestrian facilities consist of sidewalks and crosswalks along the streets and intersections in the immediate vicinity of the project site. Crosswalks with pedestrian signal heads and push buttons are located at all the signalized intersections in the study area. Though, crosswalks are not provided across Alum Rock Avenue at the northbound I-680 ramps. A mid-block unsignalized crosswalk with signage and rectangular rapid flashing beacons (RRFBs) is provided on Alum Rock Avenue at James Lick High School approximately 500 feet east of the project site.

The site plan indicates that the existing sidewalk along the project frontage on Alum Rock Avenue would be reconstructed to provide a 10-foot attached sidewalk with tree wells and a 5-foot easement (total of 15 feet). The reconstructed sidewalk on Alum Rock Avenue would provide direct access to the ground level retail space. New sidewalks would be constructed on-site between the residential buildings and the sidewalk on Alum Rock Avenue. The sidewalks would provide pedestrian connections to the residential lobbies, including elevators and mail room.

Overall, the network of sidewalks and crosswalks exhibits good connectivity and would provide new residents and retail customers with safe routes to transit services and other points of interest in the area. However, there is no sidewalk connection to the nearby bus stop on westbound Alum Rock Avenue. For this reason, inadequate ADA access is provided at this bus stop.

Grand Boulevard Requirement

The project would adhere to the Grand Boulevard design principle, which aims to enhance pedestrian access, as follows:

- The project would provide a minimum 15-foot sidewalk width along the project frontage on Alum Rock Avenue, which is a Grand Boulevard.

Bicycle Facilities

Capitol Avenue and White Road, both approximately ¼ mile from the project site, have striped bike lanes. However, these roadways run parallel to each other, and there is no street with bicycle facilities connecting these parallel roadways in the project vicinity. Alum Rock Avenue is a Grand Boulevard with

relatively high traffic volumes and currently has no bicycle facilities. Bicyclists should ride with caution on streets with no bike lanes or bike route markings.

The project would provide adequate on-site bicycle parking. The project would not remove any existing bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities.

According to the San Jose Better Bike Plan 2025, protected bike lanes (Class IV bike facilities) are planned along Alum Rock Avenue between Capitol Avenue and White Road. Thus, the project would be required to pay an in-lieu fee of \$121 per linear feet (LF) of project site frontage.

Recommendation: Pay an in-lieu fee of \$121 per linear feet (LF) of project site frontage to go toward implementing the protected bike lanes (Class IV) that are planned along Alum Rock Avenue as described in the San Jose Better Bike Plan 2025.

Pedestrian and Bicycle Access to Schools

The following public schools are located within 1/2-mile walking distance of the project site:

- Lester Shields Elementary School located 0.5 miles to the north on Gay Avenue;
- Russo/McEntee Academy (Elementary School) located 0.5 miles to the north on Gay Avenue;
- Lyndale Elementary School located 0.5 miles to the southeast on Nordyke Drive;
- Escuela Popular (Bilingual School) located 0.4 miles to the north on White Road;
- Foothill High School located 0.5 miles to the northwest on Pala Avenue; and
- James Lick High School just a short walk from the site on the north side of Alum Rock Avenue.

Safe pedestrian access to all six schools is provided via a continuous network of sidewalks in the study area. Crosswalks with pedestrian signal heads and push buttons are provided at all the signalized intersections, and many unsignalized intersections near the schools have crosswalks. Curb ramps are provided at most intersections along the routes between the project site and the schools, though not all meet the current ADA design standards.

Striped bike lanes on Capitol Avenue and White Road could be utilized to travel between the project site and some of these schools. However, these roadways do not provide direct access to most of the schools.

The project should consider working with these nearby schools to implement a Safe Routes to Schools program, if one does not already exist, since the project would add traffic to the area, and some students attending these schools may reside at the project site. Safe Routes to Schools is designed to decrease traffic and pollution and increase the health of children and the community as a whole. The program promotes walking and biking to school through education and incentives. The program also addresses the safety concerns of parents by encouraging greater enforcement of traffic laws, educating the public, and exploring ways to create safer streets. A comprehensive Safe Routes to Schools program should identify a focused area surrounding the school, provide a map with the routes that children can take to and from school, and recommend improvements to routes if necessary. It should address such pedestrian safety issues as dangerous intersections and missing or ineffective crosswalks, sidewalks, and curb ramps.

Transit Services

The high density affordable residential mixed-use project is located in a Planned Growth Area (PGA) with low VMT and high-quality transit. Five VTA bus routes provide service to the study area. Bus stops served by Route 25 are located just 250 feet west of the project site on Alum Rock Avenue at Pleasant Ridge Avenue. Bus Route 25 provides service to the Alum Rock LRT Station, located less than 1/2-mile south of the project site.

Currently, pedestrian access to the nearby bus stop on westbound Alum Rock Avenue is provided via a frontage road on the north side of Alum Rock Avenue. There is no sidewalk along the south side of the frontage road/north side of Alum Rock Avenue that provides access to the bus stop. Thus, this bus stop is not ADA compliant.

Due to the project site's proximity to transit stops, it is reasonable to assume that some residents would utilize the transit services provided. It is estimated that the small increase in transit demand generated by the proposed project could be accommodated by the current available ridership capacity of the transit service in the study area.

The project would utilize a single existing driveway on Alum Rock Avenue, thereby minimizing the number of driveways required to serve the project along the project frontage. Accordingly, the project would adhere to the Grand Boulevard design principle that requires projects to minimize driveway cuts in order to minimize transit delay.

Vision Zero San Jose

Alum Rock Avenue between US 101 and Manning Avenue is designated as a "Safety Priority Street" as part of San Jose's Vision Zero policy (*Vision Zero San Jose*, April 2015). The goal of Vision Zero San Jose is to create a community culture that prioritizes traffic safety. Vision Zero is designed to create policies that focus on roadway safety for all modes, particularly non-automobile modes. Streets with these "Safety Priority Street" designations are given priority within the City's Transportation Capital Improvement Program (CIP) to provide safer transportation systems for all users.

The project would provide a 15-foot-wide sidewalk along its frontage and site access would be provided via one standard 26-foot-wide driveway. Thus, the project would be compatible with the City's Vision Zero policy.

Construction Activities

Typical activities related to the construction of any development could include lane narrowing and/or lane closures, sidewalk closures, crosswalk closures, and bike lane closures. In the event of any type of closure, clear signage (e.g., closure and detour signs) must be provided to ensure vehicles, pedestrians and bicyclists are able to adequately reach their intended destinations safely. Per City standard practice, the project would be required to submit a construction management plan for City approval that addresses the construction schedule, street closures and/or detours, construction staging areas, construction vehicle parking, and the planned truck routes.

Parking

The project parking requirements per the City of San Jose's Zoning Code are described below.

Vehicle Parking Requirements

Residential Vehicle Parking Requirement

The City of San Jose's off-street parking requirements as described in the City's Zoning Code (Chapter 20.90, Table 20-210) for multiple dwellings with all open parking are as follows: 1.25 parking spaces for studio and one-bedroom units and 1.7 parking spaces for two-bedroom units. Based on the City's off-street parking requirement and prior to applying any relevant parking reductions, the 164-unit project would require a total of 212 parking spaces calculated as follows:

- 150 studio/one-bedroom units x 1.25 spaces = 188 parking spaces
- 14 two-bedroom units x 1.7 spaces = 24 parking spaces

Residential Parking Reductions

The project site is located within 2,000 feet of an existing LRT station (Alum Rock Station), and the project would provide adequate bicycle parking. Thus, the project qualifies for a 20 percent reduction in the City's parking requirement (per San Jose Municipal Code). However, since the project would consist of 100% affordable units, the project is eligible for an even larger parking reduction per Assembly Bill (AB) 744. AB 744 states that for 100% affordable housing developments located within one-half mile of a major transit stop, the parking requirement cannot exceed 0.5 spaces per unit. After applying the reduced parking rate (state bonus density) to the 164 affordable residential units, 82 parking spaces would be required to serve the residential component of the project ($164 \text{ units} \times 0.5 = 82 \text{ spaces}$).

Retail Vehicle Parking Requirement

The City of San Jose vehicle parking requirement for retail/commercial uses located within Urban Villages was applied to the project and is 1 space per 400 s.f. Based on this parking requirement, the project would require 19 parking spaces to serve the 7,500 s.f. of ground-floor retail space that is being proposed ($7,500 \text{ s.f.} / 400 = 18.75 \text{ spaces}$).

After applying all relevant parking reductions, the project is required to provide a total of 101 vehicle parking spaces consisting of 82 residential spaces and 19 retail spaces.

Vehicle Parking Supply

The site plan shows a total of 103 off-street vehicle parking spaces consisting of 82 residential parking spaces (42 secure garage spaces and 40 open spaces outside the garage), 20 retail parking spaces (all open parking), and one parking space reserved for mail delivery vehicles. Thus, the project would meet the City's residential off-street parking requirement and would exceed the City's retail off-street parking requirement by one space.

Motorcycle and Bicycle Parking Requirements

The motorcycle and bicycle parking requirements for the residential and retail components of the project are described below.

Motorcycle Parking Requirement

The City requires one motorcycle parking space for every four residential units and one motorcycle parking space per every 20 code-required retail vehicle parking spaces (per Chapter 20.90, Tables 20-190, 20-210 and 20-250 of the City's Zoning Code). This equates to 42 motorcycle parking spaces: 41 spaces to serve the residential use and 1 space (rounded up) to serve the retail use. Applying a 20 percent reduction (Urban Village reduction) equates to a motorcycle parking requirement of 34 spaces.

Bicycle Parking Requirement

The City requires one bicycle parking space for every four residential units and one bicycle parking space for every 3,000 s.f. of retail space (per Chapter 20.90, Tables 20-190 and 20-210 of the City's Zoning Code). Note also that a minimum of three bicycle parking spaces shall be provided for retail uses. Thus, the project is required to provide a total of 44 bicycle parking spaces: 41 bicycle spaces to serve the residents and 3 bicycle spaces to serve the retail customers.

Motorcycle and Bicycle Parking Supply

According to the site plan, the project would provide 3 motorcycle spaces to serve the residential use and is not proposing to provide any motorcycle parking for the retail component of the project.

Recommendation: The project applicant should coordinate with the City of San Jose Planning Department to determine whether the project would be required to provide additional motorcycle parking for the residential component of the project.

The project is proposing to provide 45 bicycle parking spaces for residents and 3 bicycle parking spaces for retail customers, which would exceed the City's residential bicycle parking requirement and would meet the City's retail bicycle parking requirement. As shown on the site plan (see highlighted areas on Figure 2), the 45 residential bicycle parking spaces would be provided via exterior bike racks on the east side (one 15-bike rack) and west side (two 15-bike racks) of Building B. The 3 retail bicycle parking spaces would be provided along the Alum Rock Avenue frontage via a bike rack near the retail entrance.

5. Conclusions

This report presents the results of the local transportation analysis (LTA) conducted for a proposed affordable residential mixed-use development located at 2880 Alum Rock Avenue in San Jose, California. The project involves demolishing an existing vacant 8,200 square foot (s.f.) commercial building on the 1.32-acre project site and constructing two 6-story buildings with a total of 164 affordable apartment units and up to 7,500 s.f. of retail space. Building A would consist of 119 affordable apartment units (5 residential levels) over a maximum of 7,500 s.f. of ground level retail space and a 29-space secure at-grade parking level. Building B would consist of 45 affordable apartment units (5 residential levels) over a 13-space secure at-grade parking level. Access to the project site would be provided via a single full-access driveway on Alum Rock Avenue.

The project site is located within the Alum Rock Avenue East Urban Village, a Horizon 1 future Urban Village. Urban Villages are walkable, bicycle-friendly, transit-oriented, mixed-use settings that provide both housing and jobs, thus supporting the Envision San Jose 2040 General Plan's environmental goals. The project fronts Alum Rock Avenue, which is designated as a Grand Boulevard within the Envision San Jose 2040 General Plan. Grand Boulevards are major transportation corridors with transit priority that connect city neighborhoods.

This study was conducted for the purpose of identifying the potential transportation impacts and traffic operations effects related to the project. The transportation impacts of the project were evaluated following the standards and methodologies established by the City of San Jose. Based on the City of San Jose's Transportation Analysis Policy (Policy 5-1) and the screening criteria contained in the *Transportation Analysis Handbook* (April 2018), the project is expected to result in a less-than-significant CEQA transportation impact. Therefore, a vehicle-miles traveled (VMT) analysis is not required for the project. However, an LTA is required and was prepared to identify potential traffic operational issues related to the project. The LTA includes an evaluation of weekday AM and PM peak hour traffic conditions for four signalized intersections in the immediate vicinity of the project site. The LTA also includes an analysis of site access, on-site circulation, parking, vehicle queuing, and effects on transit, bicycle, and pedestrian facilities.

Local Transportation Analysis

Project Trip Generation

Vehicle trips that would be generated by the proposed residential mixed-use project were estimated using the ITE average trip rates for "Multifamily Housing Mid-Rise" (ITE Land Use 221) and "Shopping Center" (ITE Land Use 820) located in a General Urban/Suburban setting. The project trip generation was reduced based on site location factors, applicable internal and external trip reductions, and project-

specific factors in accordance with standard San Jose procedures. After applying the ITE trip rates and applicable trip reductions, the proposed project is estimated to generate 849 daily vehicle trips, with 51 new trips (15 inbound and 36 outbound) occurring during the AM peak hour and 68 new trips (40 inbound and 28 outbound) occurring during the PM peak hour

Intersection Traffic Operations

The results of the analysis show that the signalized study intersections would operate at an acceptable level of service (LOS D or better) during both the AM and PM peak hours of traffic under all traffic scenarios.

Other Transportation Items

The project would not have an adverse effect on the existing pedestrian, bicycle, or transit facilities in the area. The proposed site plan shows adequate site access and on-site circulation, and no significant operational issues are expected to occur as a result of the project. Below are recommendations resulting from the site plan review.

Recommendations

- Include at least 6 feet of red curb on the west side of the project driveway on Alum Rock Avenue to ensure adequate sight distance is provided.
- Provide adequate space for vehicles to turn around at each end of the main drive aisle.
- Either relocate or reorient the motorcycle parking spaces within the Building A parking garage to provide more backup room for residents using the parking stall situated adjacent to the commercial trash room; or assign this parking stall to a resident with a compact vehicle.
- Assign the parking stall situated adjacent to the boiler room within the Building B parking garage to a resident with a compact vehicle.
- Provide at least one off-street loading space for residential move-in/move-out and commercial freight loading activities.
- Pay an in-lieu fee of \$121 per linear feet (LF) of project site frontage to go toward implementing the protected bike lanes (Class IV) that are planned along Alum Rock Avenue as described in the San Jose Better Bike Plan 2025.
- Coordinate with the City of San Jose Planning Department to determine whether the project would be required to provide additional motorcycle parking for the residential component of the project.

**2880 Alum Rock Avenue Residential Mixed-Use
Development LTA**

Technical Appendices

Appendix A

Traffic Volumes

Intersection Number: **1**
 Traffic Node Number: 3043
 Intersection Name: I-680 SB Off-Ramp & Alum Rock Avenue
Peak Hour: AM
 Count Date: 12/07/17
 Scenario: 164 DU + 7,500 SF Retail

Date of Analysis: 01/28/21

SJ Growth Factor (% Per Year): **0.01**Number of Years: **3.17**

Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Count (Dec 2017)	197	15	133	745	573	0	18	0	47	33	714	0	2475
1% Annual Growth (SJ Count Adjustment)	6	0	4	24	18	0	1	0	1	1	23	0	78
Existing Conditions (Feb 2021)	203	15	137	769	591	0	19	0	48	34	737	0	2553
Approved Project Trips													
San Jose ATI	1	0	0	0	0	0	0	0	0	0	3	0	4
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	1	0	0	0	0	0	0	0	0	0	3	0	4
Background Conditions	204	15	137	769	591	0	19	0	48	34	740	0	2557
Bkgrd check	204	15	137	769	591	0	19	0	48	34	740	0	
Project Trips													
Residential Project Trips	0	0	3	8	12	0	0	0	0	0	5	0	28
Retail Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	3	8	12	0	0	0	0	0	5	0	28
Background + Project Conditions	204	15	140	777	603	0	19	0	48	34	745	0	2585
Bkgrd+Proj check	204	15	140	777	603	0	19	0	48	34	745	0	

Intersection Number: **2**
 Traffic Node Number: 3042
 Intersection Name: I-680 NB Off-Ramp & Alum Rock Avenue
Peak Hour: AM
 Count Date: 12/07/17
 Scenario: 164 DU + 7,500 SF Retail

Date of Analysis: 01/28/21

SJ Growth Factor (% Per Year): **0.01**Number of Years: **3.17**

			Movements											Total	
			North Approach			East Approach			South Approach			West Approach			
Scenario:		RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Count (Dec 2017)			0	0	0	676	1189	0	447	6	151	368	495	0	3332
1% Annual Growth (SJ Count Adjustment)			0	0	0	21	38	0	14	0	5	12	16	0	106
Existing Conditions (Feb 2021)			0	0	0	697	1227	0	461	6	156	380	511	0	3438
Approved Project Trips															
	San Jose ATI	0	0	0	3	7	0	9	0	3	4	5	0	31	
	Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total Approved Trips	0	0	0	3	7	0	9	0	3	4	5	0	31	
Background Conditions			0	0	0	700	1234	0	470	6	159	384	516	0	3469
	Bkgrd check	0	0	0	700	1234	0	470	6	159	384	516	0		
Project Trips															
	Residential Project Trips	0	0	0	7	20	0	3	0	0	0	7	0	37	
	Retail Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Total Project Trips	0	0	0	7	20	0	3	0	0	0	7	0	37	
Background + Project Conditions			0	0	0	707	1254	0	473	6	159	384	523	0	3506
	Bkgrd+Proj check	0	0	0	707	1254	0	473	6	159	384	523	0		

Intersection Number: **3**
 Trafix Node Number: 3062
 Intersection Name: Capitol Avenue & Alum Rock Avenue
Peak Hour: AM
 Count Date: 09/25/18
 Scenario: 164 DU + 7,500 SF Retail

Date of Analysis: 01/28/21

SJ Growth Factor (% Per Year): **0.01**Number of Years: **2.42**

Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Count (Sep 2018)	94	252	85	99	944	95	162	700	568	106	672	160	3937
1% Annual Growth (SJ Count Adjustment)	2	6	2	2	23	2	4	17	14	3	16	4	95
Existing Conditions (Feb 2021)	96	258	87	101	967	97	166	717	582	109	688	164	4032
Approved Project Trips													
San Jose ATI	0	5	4	4	44	0	5	18	16	8	35	3	142
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	5	4	4	44	0	5	18	16	8	35	3	142
Background Conditions	96	263	91	105	1011	97	171	735	598	117	723	167	4174
Bkgrd check	96	263	91	105	1011	97	171	735	598	117	723	167	
Project Trips													
Residential Project Trips	0	0	1	2	27	2	1	0	0	0	11	0	44
Retail Project Trips	0	0	0	1	1	1	0	0	0	0	0	0	3
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	1	3	28	3	1	0	0	0	11	0	47
Background + Project Conditions	96	263	92	108	1039	100	172	735	598	117	734	167	4221
Bkgrd+Proj check	96	263	92	107	1038	100	172	735	598	117	734	167	

Intersection Number: **4**
 Trafix Node Number: 3065
 Intersection Name: White Road & Alum Rock Avenue
Peak Hour: AM
 Count Date: 09/25/18
 Scenario: 164 DU + 7,500 SF Retail

Date of Analysis: 01/28/21

SJ Growth Factor (% Per Year): **0.01**Number of Years: **2.42**

				Movements												
				North Approach			East Approach			South Approach			West Approach			
Scenario:		RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total		
Existing Count (Sep 2018)				75	434	69	139	728	134	41	652	260	219	403	183	3337
1% Annual Growth (SJ Count Adjustment)				2	10	2	3	18	3	1	16	6	5	10	4	81
Existing Conditions (Feb 2021)				77	444	71	142	746	137	42	668	266	224	413	187	3418
Approved Project Trips																
	San Jose ATI	0	37	0	0	11	10	3	14	24	33	7	0	139		
	Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Total Approved Trips	0	37	0	0	11	10	3	14	24	33	7	0	139		
Background Conditions				77	481	71	142	757	147	45	682	290	257	420	187	3557
	Bkgrd check	77	481	71	142	757	147	45	682	290	257	420	187			
Project Trips																
	Residential Project Trips	1	0	0	0	0	0	0	0	1	1	0	1	4		
	Retail Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Total Project Trips	1	0	0	0	0	0	0	0	1	1	0	1	4		
Background + Project Conditions				78	481	71	142	757	147	45	682	291	258	420	188	3561
	Bkgrd+Proj check	78	481	71	142	757	147	45	682	291	259	420	189			

Intersection Number: **1**
 Traffic Node Number: 3043
 Intersection Name: I-680 SB Off-Ramp & Alum Rock Avenue
Peak Hour: PM
 Count Date: 12/13/18
 Scenario: 164 DU + 7,500 SF Retail

Date of Analysis: 01/28/21

SJ Growth Factor (% Per Year): **0.01**Number of Years: **2.17**

Movements													
Scenario:	North Approach			East Approach			South Approach			West Approach			Total
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	
Existing Count (Dec 2018)	213	5	214	636	476	0	15	0	24	23	602	0	2208
1% Annual Growth (SJ Count Adjustment)	5	0	5	14	10	0	0	0	1	0	13	0	48
Existing Conditions (Feb 2021)	218	5	219	650	486	0	15	0	25	23	615	0	2256
Approved Project Trips													
San Jose ATI	2	0	0	0	1	0	0	0	0	0	2	0	5
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	2	0	0	0	1	0	0	0	0	0	2	0	5
Background Conditions	220	5	219	650	487	0	15	0	25	23	617	0	2261
Bkgrd check	220	5	219	650	487	0	15	0	25	23	617	0	
Project Trips													
Residential Project Trips	0	0	7	5	7	0	0	0	0	0	12	0	31
Retail Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Project Trips	0	0	7	5	7	0	0	0	0	0	12	0	31
Background + Project Conditions	220	5	226	655	494	0	15	0	25	23	629	0	2292
Bkgrd+Proj check	220	5	226	655	494	0	15	0	25	23	629	0	

Intersection Number: **2**
 Traffic Node Number: 3042
 Intersection Name: I-680 NB Off-Ramp & Alum Rock Avenue
Peak Hour: PM
 Count Date: 12/18/18
 Scenario: 164 DU + 7,500 SF Retail

Date of Analysis: 01/28/21

SJ Growth Factor (% Per Year): **0.01**Number of Years: **2.17**

				Movements												
				North Approach			East Approach			South Approach			West Approach			
Scenario:		RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total		
Existing Count (Dec 2018)				0	0	0	225	983	0	792	6	106	140	653	0	2905
1% Annual Growth (SJ Count Adjustment)				0	0	0	5	21	0	17	0	2	3	14	0	63
Existing Conditions (Feb 2021)				0	0	0	230	1004	0	809	6	108	143	667	0	2968
Approved Project Trips																
	San Jose ATI	0	0	0	4	22	0	0	0	0	1	5	0	32		
	Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Total Approved Trips	0	0	0	4	22	0	0	0	0	1	5	0	32		
Background Conditions				0	0	0	234	1026	0	809	6	108	144	672	0	3000
	Bkgrd check	0	0	0	234	1026	0	809	6	108	144	672	0			
Project Trips																
	Residential Project Trips	0	0	0	4	13	0	8	0	0	0	18	0	43		
	Retail Project Trips	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Total Project Trips	0	0	0	4	13	0	8	0	0	0	18	0	43		
Background + Project Conditions				0	0	0	238	1039	0	817	6	108	144	690	0	3043
	Bkgrd+Proj check	0	0	0	238	1039	0	817	6	108	144	690	0			

Intersection Number: **3**
 Traffic Node Number: 3062
 Intersection Name: Capitol Avenue & Alum Rock Avenue
Peak Hour: PM
 Count Date: 12/13/18
 Scenario: 164 DU + 7,500 SF Retail

Date of Analysis: 01/28/21

SJ Growth Factor (% Per Year): **0.01**Number of Years: **2.17**

Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Count (Dec 2018)	103	629	207	64	720	144	134	264	229	195	892	103	3684	
1% Annual Growth (SJ Count Adjustment)	2	14	4	1	16	3	3	6	5	4	19	2	80	
Existing Conditions (Feb 2021)	105	643	211	65	736	147	137	270	234	199	911	105	3764	
Approved Project Trips														
San Jose ATI	5	25	7	4	25	1	2	13	7	9	41	0	139	
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0	
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Approved Trips	5	25	7	4	25	1	2	13	7	9	41	0	139	
Background Conditions	110	668	218	69	761	148	139	283	241	208	952	105	3903	
Bkgrd check	110	668	218	69	761	148	139	283	241	208	952	105		
Project Trips														
Residential Project Trips	0	0	2	1	17	1	2	0	0	0	27	0	50	
Retail Project Trips	0	0	1	1	1	1	1	0	0	0	1	0	6	
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Project Trips	0	0	3	2	18	2	3	0	0	0	28	0	56	
Background + Project Conditions	110	668	221	71	779	150	142	283	241	208	980	105	3959	
Bkgrd+Proj check	110	668	221	71	779	151	142	283	241	208	980	105		

Intersection Number: **4**
 Traffic Node Number: 3065
 Intersection Name: White Road & Alum Rock Avenue
Peak Hour: PM
 Count Date: 12/13/18
 Scenario: 164 DU + 7,500 SF Retail

Date of Analysis: 01/28/21

SJ Growth Factor (% Per Year): **0.01**Number of Years: **2.17**

Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Count (Dec 2018)	78	624	65	70	509	163	124	422	208	412	682	136	3493	
1% Annual Growth (SJ Count Adjustment)	2	14	1	2	11	4	3	9	5	9	15	3	76	
Existing Conditions (Feb 2021)	80	638	66	72	520	167	127	431	213	421	697	139	3569	
Approved Project Trips														
San Jose ATI	0	23	0	0	4	8	14	43	31	26	12	0	161	
Approved 2	0	0	0	0	0	0	0	0	0	0	0	0	0	
Approved 3	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Approved Trips	0	23	0	0	4	8	14	43	31	26	12	0	161	
Background Conditions	80	661	66	72	524	175	141	474	244	447	709	139	3730	
Bkgrd check	80	661	66	72	524	175	141	474	244	447	709	139		
Project Trips														
Residential Project Trips	1	0	0	0	0	0	0	0	1	1	0	1	4	
Retail Project Trips	1	0	0	0	1	0	0	0	1	1	1	1	6	
Existing Trip Credits	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Project Trips	2	0	0	0	1	0	0	0	2	2	1	2	10	
Background + Project Conditions	82	661	66	72	525	175	141	474	246	449	710	141	3740	
Bkgrd+Proj check	82	661	66	72	525	175	141	474	246	449	710	141		

Appendix B

Approved Trips Inventory

AM PROJECT TRIPS

01/20/2021

Intersection of : Alum Rock Av & NB 680 From Alum Rock Rp / NB 680 To Alum Rock Rp**Traffic Node Number :** 3042

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
NSJ LEGACY	3	0	9	0	0	0	0	4	2	0	7	3
NORTH SAN JOSE												
PDC02-082 (3-15360) Residential ALUM ROCK & MCCREERY (SW/C) BLACKWELL HOUSING	0	0	0	0	0	0	0	1	2	0	0	0
TOTAL:	3	0	9	0	0	0	0	5	4	0	7	3

	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	0	7	3
SOUTH	3	0	9
WEST	0	5	4

PM PROJECT TRIPS

01/20/2021

Intersection of : Alum Rock Av & NB 680 From Alum Rock Rp / NB 680 To Alum Rock Rp**Traffic Node Number :** 3042

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
NSJ LEGACY	0	0	0	0	0	0	0	5	0	0	21	4
NORTH SAN JOSE												
PDC02-082 (3-15360) Residential ALUM ROCK & MCCREERY (SW/C) BLACKWELL HOUSING	0	0	0	0	0	0	0	0	1	0	1	0
TOTAL:	0	0	0	0	0	0	0	5	1	0	22	4

	LEFT	THRU	RIGHT
NORTH	0	0	0
EAST	0	22	4
SOUTH	0	0	0
WEST	0	5	1

AM PROJECT TRIPS

01/20/2021

Intersection of : Alum Rock Av & SB 680 To Alum Rock Rp / Foss Av**Traffic Node Number :** 3043

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
PDC02-082 (3-15360) Residential ALUM ROCK & MCCREERY (SW/C) BLACKWELL HOUSING	0	0	0	0	0	1	0	3	0	0	0	0
TOTAL:	0	0	0	0	0	1	0	3	0	0	0	0

	LEFT	THRU	RIGHT
NORTH	0	0	1
EAST	0	0	0
SOUTH	0	0	0
WEST	0	3	0

PM PROJECT TRIPS

01/20/2021

Intersection of : Alum Rock Av & SB 680 To Alum Rock Rp / Foss Av**Traffic Node Number :** 3043

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
PDC02-082 (3-15360) Residential ALUM ROCK & MCCREERY (SW/C) BLACKWELL HOUSING	0	0	0	0	0	2	0	2	0	0	1	0
TOTAL:	0	0	0	0	0	2	0	2	0	0	1	0

	LEFT	THRU	RIGHT
NORTH	0	0	2
EAST	0	1	0
SOUTH	0	0	0
WEST	0	2	0

AM PROJECT TRIPS

01/20/2021

Intersection of : Alum Rock Av & N Capitol Av**Traffic Node Number :** 3062

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
NSJ LEGACY	8	11	5	0	0	0	3	13	2	0	12	0
NORTH SAN JOSE												
PDC03-093 (3-03081) Retail/Commercial MCKEE RD AND N JACKSON AV SJ REGIONAL MEDICAL CENTER	7	0	0	0	0	0	0	20	5	0	30	0
PDC03-108 OFF (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFI BERRYESSA FLEA MKT (OFFICE)	1	5	0	0	1	0	0	0	0	0	1	2
PDC03-108 RES (3-16680) Residential BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RESIDENTIAL)	0	2	0	4	4	0	0	2	1	0	1	2
PDC03-108 RET (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RETAIL)	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL:	16	18	5	4	5	0	3	35	8	0	44	4

	LEFT	THRU	RIGHT
NORTH	4	5	0
EAST	0	44	4
SOUTH	16	18	5
WEST	3	35	8

PM PROJECT TRIPS

01/20/2021

Intersection of : Alum Rock Av & N Capitol Av**Traffic Node Number :** 3062

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
NSJ LEGACY	3	8	2	3	19	5	0	5	0	1	10	0
NORTH SAN JOSE												
PDC03-093 (3-03081) Retail/Commercial MCKEE RD AND N JACKSON AV SJ REGIONAL MEDICAL CENTER	3	0	0	0	0	0	0	34	8	0	13	0
PDC03-108 OFF (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA RD WEST OF UNION PACIFI BERRYESSA FLEA MKT (OFFICE)	0	1	0	2	4	0	0	1	1	0	0	0
PDC03-108 RES (3-16680) Residential BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RESIDENTIAL)	1	4	0	2	2	0	0	1	0	0	2	4
PDC03-108 RET (3-16680) Retail/Commercial BOTH SIDES OF BERRYESSA, WEST OF UNION PACIFIC BERRYESSA FLEA MKT (RETAIL)	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL:	7	13	2	7	25	5	0	41	9	1	25	4

	LEFT	THRU	RIGHT
NORTH	7	25	5
EAST	1	25	4
SOUTH	7	13	2
WEST	0	41	9

AM PROJECT TRIPS

01/20/2021

Intersection of : Alum Rock Av & N White Rd & S White Rd**Traffic Node Number :** 3065

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
EEHDP (OFFICE) Office/Industrial EVERGREEN EEHDP (OFFICE)	0	0	0	0	1	0	0	0	0	0	0	0
EEHDP (RES) Residential EVERGREEN EEHDP (RESIDENTIAL)	0	0	0	0	0	0	0	0	0	0	0	0
EEHDP (RETAIL) Retail/Commercial EVERGREEN EEHDP (RETAIL)	0	3	1	0	4	0	0	0	0	2	0	0
PDC03-093 (3-03081) Retail/Commercial MCKEE RD AND N JACKSON AV SJ REGIONAL MEDICAL CENTER	19	3	0	0	2	0	0	7	13	0	11	0
PDC81-03-017 (3-06434) Office/Industrial YERBA BUENA & FOWLER CAMPUS INDUSTRIAL	5	8	2	0	30	0	0	0	20	8	0	0
TOTAL:	24	14	3	0	37	0	0	7	33	10	11	0

	LEFT	THRU	RIGHT
NORTH	0	37	0
EAST	10	11	0
SOUTH	24	14	3
WEST	0	7	33

PM PROJECT TRIPS

01/20/2021

Intersection of : Alum Rock Av & N White Rd & S White Rd**Traffic Node Number :** 3065

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
EEHDP (OFFICE) Office/Industrial EVERGREEN EEHDP (OFFICE)	0	1	0	0	0	0	0	0	0	0	0	0
EEHDP (RES) Residential EVERGREEN EEHDP (RESIDENTIAL)	0	0	0	0	1	0	0	0	0	0	0	0
EEHDP (RETAIL) Retail/Commercial EVERGREEN EEHDP (RETAIL)	3	11	6	0	11	0	0	0	0	6	0	0
PDC03-093 (3-03081) Retail/Commercial MCKEE RD AND N JACKSON AV SJ REGIONAL MEDICAL CENTER	8	1	0	0	3	0	0	12	21	0	4	0
PDC81-03-017 (3-06434) Office/Industrial YERBA BUENA & FOWLER CAMPUS INDUSTRIAL	20	30	8	0	8	0	0	0	5	2	0	0
TOTAL:	31	43	14	0	23	0	0	12	26	8	4	0

	LEFT	THRU	RIGHT
NORTH	0	23	0
EAST	8	4	0
SOUTH	31	43	14
WEST	0	12	26

Appendix C

VMT Evaluation Tool Summary Report

CITY OF SAN JOSE VEHICLE MILES TRAVELED EVALUATION TOOL SUMMARY REPORT

PROJECT:

Name: 2880 Alum Rock Avenue Affordable Housing Project Tool Version: 2/29/2019
 Location: S Side of Alum Rock Av, 1,070 ft E of Capitol Av Date: 4/13/2021
 Parcel: 48420040 Parcel Type: Suburb with Multifamily Housing
 Proposed Parking Spaces Vehicles: 103 Bicycles: 48

LAND USE:

Residential:		Percent of All Residential Units	
Single Family	0 DU	Extremely Low Income ($\leq 30\%$ MFI)	0 % Affordable
Multi Family	164 DU	Very Low Income ($> 30\%$ MFI, $\leq 50\%$ MFI)	0 % Affordable
Subtotal	164 DU	Low Income ($> 50\%$ MFI, $\leq 80\%$ MFI)	100 % Affordable
Office:	0 KSF		
Retail:	7.5 KSF		
Industrial:	0 KSF		

VMT REDUCTION STRATEGIES

Tier 1 - Project Characteristics

Increase Residential Density	
Existing Density (DU/Residential Acres in half-mile buffer)	7
With Project Density (DU/Residential Acres in half-mile buffer)	8
Increase Development Diversity	
Existing Activity Mix Index	0.31
With Project Activity Mix Index	0.30
Integrate Affordable and Below Market Rate	
Extremely Low Income BMR units	0 %
Very Low Income BMR units	0 %
Low Income BMR units	100 %
Increase Employment Density	
Existing Density (Jobs/Commercial Acres in half-mile buffer)	15
With Project Density (Jobs/Commercial Acres in half-mile buffer)	15

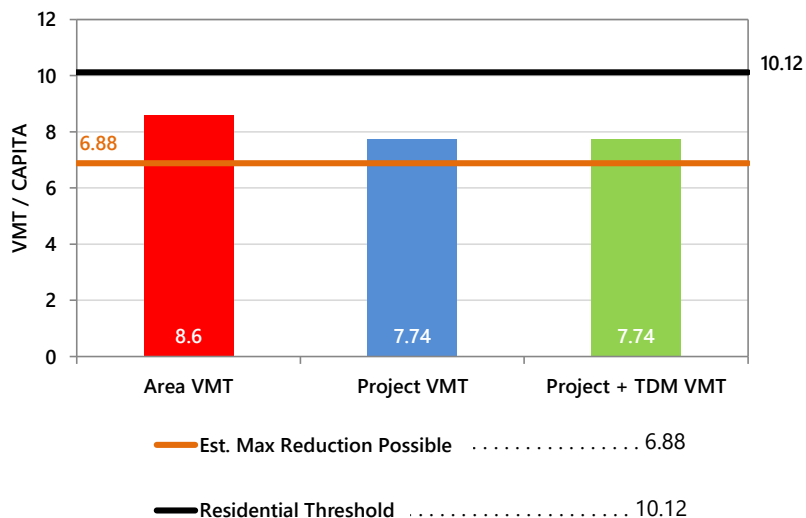
Tier 2 - Multimodal Infrastructure

Tier 3 - Parking

Tier 4 - TDM Programs

RESIDENTIAL ONLY

The tool estimates that the project would generate per capita VMT below the City's threshold.

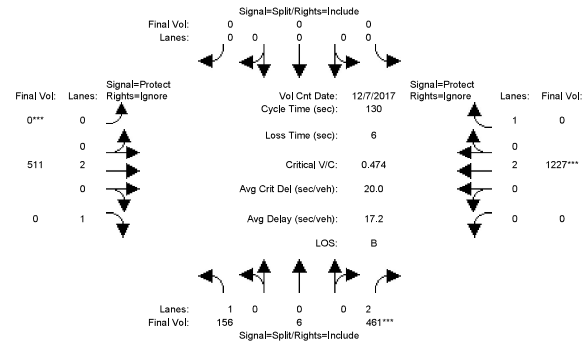


Appendix D

Intersection Level of Service Calculations

2880 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2880 Alum Rock Avenue, San Jose, CA
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #3042: 680/ALUM ROCK (E)



Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Min. Green:	10	0	10		0	0	0		0	10	10		0	10	10	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Volume Module: >> Count Date: 7 Dec 2017 << 7:15-8:15																
Base Vol:	156	6	461		0	0	0		0	511	380		0	1227	697	
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:	156	6	461		0	0	0		0	511	380		0	1227	697	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	156	6	461		0	0	0		0	511	380		0	1227	697	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
PHF Volume:	156	6	461		0	0	0		0	511	0		0	1227	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	156	6	461		0	0	0		0	511	0		0	1227	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
Final Volume:	156	6	461		0	0	0		0	511	0		0	1227	0	

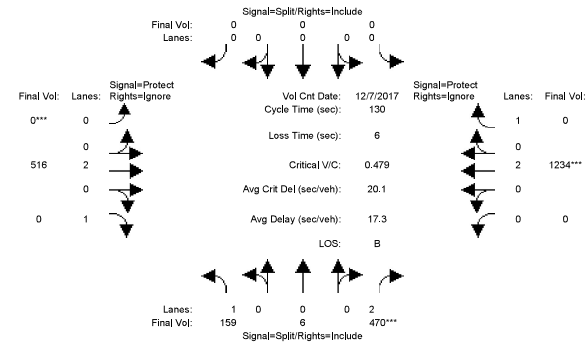
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.94		0.92	1.00	0.92		0.92	1.00	0.92		0.92	1.00	0.92	
Lanes:	0.96	0.04	2.00		0.00	0.00	0.00		0.00	2.00	1.00		0.00	2.00	1.00	
Final Sat.:	1733	67	3555		0	0	0		0	3800	1750		0	3800	1750	

Capacity Analysis Module:																
Vol/Sat:	0.09	0.09	0.13		0.00	0.00	0.00		0.00	0.13	0.00		0.00	0.32	0.00	
Crit Moves:	****	****	****		****	****	****		****	****	****		****	****	****	
Green Time:	35.5	35.5	35.5		0.0	0.0	0.0		0.0	88.5	0.0		0.0	88.5	0.0	
Volume/Cap:	0.33	0.33	0.47		0.00	0.00	0.00		0.00	0.20	0.00		0.00	0.47	0.00	
Delay/Veh:	37.8	37.8	39.7		0.0	0.0	0.0		0.0	7.7	0.0		0.0	9.9	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:	37.8	37.8	39.7		0.0	0.0	0.0		0.0	7.7	0.0		0.0	9.9	0.0	
LOS by Move:	D	D	D		A	A	A		A	A	A		A	A	A	
DesignQueue:	9	9	13		0	0	0		0	6	0		0	15	0	

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

2880 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2880 Alum Rock Avenue, San Jose, CA
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #3042: 680/ALUM ROCK (E)



Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Min. Green:	10	0	10		0	0	0		0	10	10		0	10	10	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
Volume Module: >> Count Date: 7 Dec 2017 << 7:15-8:15																
Base Vol:	156	6	461		0	0	0		0	511	380		0	1227	697	
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:	156	6	461		0	0	0		0	511	380		0	1227	697	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
ATI:	3	0	9		0	0	0		0	5	4		0	7	3	
Initial Fut:	159	6	470		0	0	0		0	516	384		0	1234	700	
User Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
PHF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
PHF Volume:	159	6	470		0	0	0		0	516	0		0	1234	0	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	159	6	470		0	0	0		0	516	0		0	1234	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	0.00		1.00	1.00	0.00	
Final Volume:	159	6	470		0	0	0		0	516	0		0	1234	0	

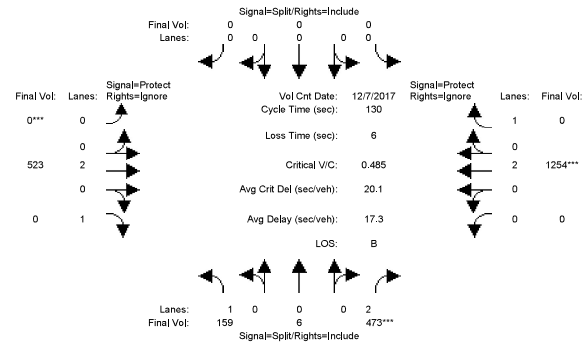
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.95	0.95	0.94		0.92	1.00	0.92		0.92	1.00	0.92		0.92	1.00	0.92	
Lanes:	0.96	0.04	2.00		0.00	0.00	0.00		0.00	2.00	1.00		0.00	2.00	1.00	
Final Sat.:	1735	65	3555		0	0	0		0	3800	1750		0	3800	1750	

Capacity Analysis Module:																
Vol/Sat:	0.09	0.09	0.13		0.00	0.00	0.00		0.00	0.14	0.00		0.00	0.32	0.00	
Crit Moves:	****	****	****		****	****	****		****	****	****		****	****	****	
Green Time:	35.9	35.9	35.9		0.0	0.0	0.0		0.0	88.1	0.0		0.0	88.1	0.0	
Volume/Cap:	0.33	0.33	0.48		0.00	0.00	0.00		0.00	0.20	0.00		0.00	0.48	0.00	
Delay/Veh:	37.6	37.6	39.5		0.0	0.0	0.0		0.0	7.8	0.0		0.0	10.1	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:	37.6	37.6	39.5		0.0	0.0	0.0		0.0	7.8	0.0		0.0	10.1	0.0	
LOS by Move:	D	D	D		A	A	A		A	A	A		A	A	A	
DesignQueue:	9	9	14		0	0	0		0	6	0		0	16	0	

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

2880 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2880 Alum Rock Avenue, San Jose, CA
Level of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj AM

Intersection #3042: 680/ALUM ROCK (E)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 7 Dec 2017 << 7:15-8:15												
Base Vol:	156	6	461	0	0	0	0	511	380	0	1227	697
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:	156	6	461	0	0	0	0	511	380	0	1227	697
Added Vol:	0	0	3	0	0	0	0	7	0	0	20	7
ATI:	3	0	9	0	0	0	0	5	4	0	7	3
Initial Fut:	159	6	473	0	0	0	0	523	384	0	1254	707
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	159	6	473	0	0	0	0	523	0	0	1254	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	6	473	0	0	0	0	523	0	0	1254	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Final Volume:	159	6	473	0	0	0	0	523	0	0	1254	0

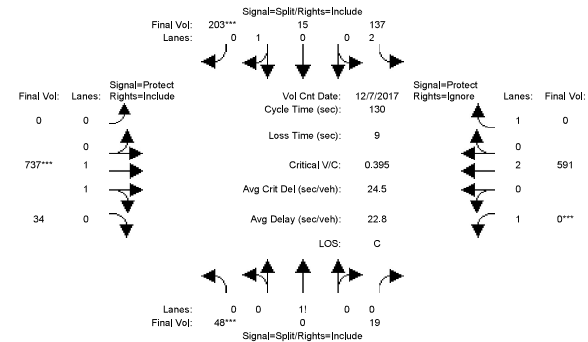
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.94	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.96	0.04	2.00	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	1735	65	3555	0	0	0	0	3800	1750	0	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.09	0.09	0.13	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.33	0.00
Crit Moves:	****			****			****			****		
Green Time:	35.6	35.6	35.6	0.0	0.0	0.0	0.0	88.4	0.0	0.0	88.4	0.0
Volume/Cap:	0.33	0.33	0.49	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.49	0.00
Delay/Veh:	37.8	37.8	39.8	0.0	0.0	0.0	0.0	7.8	0.0	0.0	10.1	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:	37.8	37.8	39.8	0.0	0.0	0.0	0.0	7.8	0.0	0.0	10.1	0.0
LOS by Move:	D	D	D	A	A	A	A	A	A	A	B	A
DesignQueue:	9	9	14	0	0	0	0	6	0	0	16	0

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

2880 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2880 Alum Rock Avenue, San Jose, CA
Level of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #3043: 680/ALUM ROCK (W)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	10	10	10	0	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 7 Dec 2017 << 7:15-8:15												
Base Vol:	48	0	19	137	15	203	0	737	34	0	591	769
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:	48	0	19	137	15	203	0	737	34	0	591	769
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	0	19	137	15	203	0	737	34	0	591	769
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	48	0	19	137	15	203	0	737	34	0	591	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	0	19	137	15	203	0	737	34	0	591	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	48	0	19	137	15	203	0	737	34	0	591	0

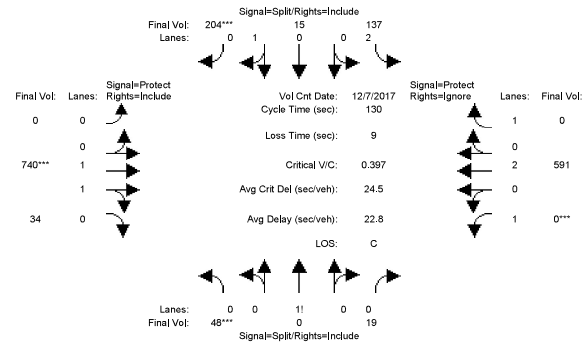
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.83	0.95	0.95	0.92	0.97	0.95	0.92	1.00	0.92
Lanes:	0.72	0.00	0.28	2.00	0.07	0.93	0.00	1.91	0.09	1.00	2.00	1.00
Final Sat.:	1254	0	496	3150	124	1676	0	3537	163	1750	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.04	0.04	0.12	0.12	0.00	0.21	0.21	0.00	0.16	0.00
Crit Moves:	****			****			****			****		
Green Time:	12.6	0.0	12.6	39.8	39.8	39.8	0.0	68.6	68.6	0.0	68.6	0.0
Volume/Cap:	0.40	0.00	0.40	0.14	0.40	0.40	0.00	0.40	0.40	0.00	0.29	0.00
Delay/Veh:	56.6	0.0	56.6	32.8	36.0	36.0	0.0	18.5	18.5	0.0	17.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.6	0.0	56.6	32.8	36.0	36.0	0.0	18.5	18.5	0.0	17.3	0.0
LOS by Move:	E	A	E	C	D	D	A	B	B	A	B	A
DesignQueue:	5	0	5	4	12	12	0	14	14	0	11	0

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

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164 Residential Units + 7,500 SF of Retail
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2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #3043: 680/ALUM ROCK (W)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	10	10	10	0	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 7 Dec 2017 << 7:15-8:15												
Base Vol:	48	0	19	137	15	203	0	737	34	0	591	769
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:	48	0	19	137	15	203	0	737	34	0	591	769
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	1	0	3	0	0	0	0
Initial Fut:	48	0	19	137	15	204	0	740	34	0	591	769
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	48	0	19	137	15	204	0	740	34	0	591	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	0	19	137	15	204	0	740	34	0	591	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	48	0	19	137	15	204	0	740	34	0	591	0

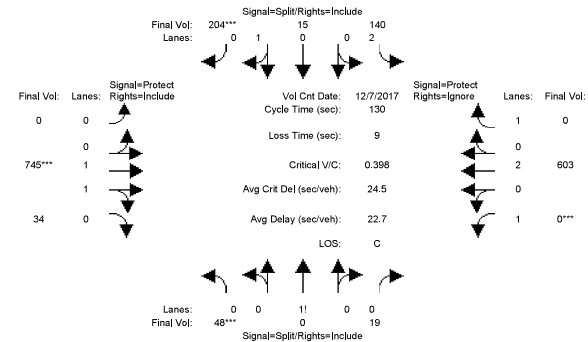
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.83	0.95	0.95	0.92	0.97	0.95	0.92	1.00	0.92
Lanes:	0.72	0.00	0.28	2.00	0.07	0.93	0.00	1.91	0.09	1.00	2.00	1.00
Final Sat.:	1254	0	496	3150	123	1677	0	3537	163	1750	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.04	0.04	0.12	0.12	0.00	0.21	0.21	0.00	0.16	0.00
Crit Moves:	****			****			****			****		
Green Time:	12.5	0.0	12.5	39.9	39.9	39.9	0.0	68.6	68.6	0.0	68.6	0.0
Volume/Cap:	0.40	0.00	0.40	0.14	0.40	0.40	0.00	0.40	0.40	0.00	0.29	0.00
Delay/Veh:	56.7	0.0	56.7	32.7	36.0	36.0	0.0	18.5	18.5	0.0	17.3	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.7	0.0	56.7	32.7	36.0	36.0	0.0	18.5	18.5	0.0	17.3	0.0
LOS by Move:	E	A	E	C	D	D	A	B	B	A	B	A
DesignQueue:	5	0	5	4	12	12	0	14	14	0	11	0

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

2880 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2880 Alum Rock Avenue, San Jose, CA
Level of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj AM

Intersection #3043: 680/ALUM ROCK (W)



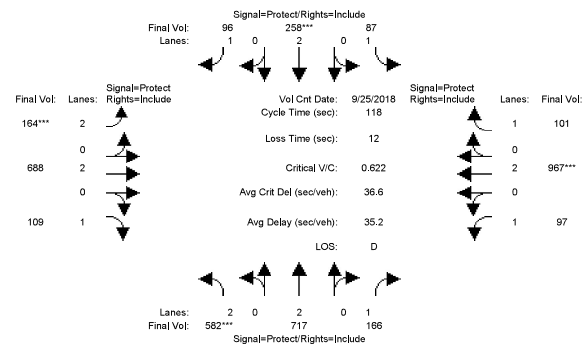
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	10	10	10	0	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 7 Dec 2017 << 7:15-8:15												
Base Vol:	48	0	19	137	15	203	0	737	34	0	591	769
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:	48	0	19	137	15	203	0	737	34	0	591	769
Added Vol:	0	0	0	3	0	0	0	5	0	0	12	8
ATI:	0	0	0	0	0	1	0	3	0	0	0	0
Initial Fut:	48	0	19	140	15	204	0	745	34	0	603	777
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	48	0	19	140	15	204	0	745	34	0	603	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	0	19	140	15	204	0	745	34	0	603	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	48	0	19	140	15	204	0	745	34	0	603	0

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.83	0.95	0.95	0.92	0.97	0.95	0.92	1.00	0.92
Lanes:	0.72	0.00	0.28	2.00	0.07	0.93	0.00	1.91	0.09	1.00	2.00	1.00
Final Sat.:	1254	0	496	3150	123	1677	0	3538	161	1750	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.04	0.00	0.04	0.04	0.12	0.12	0.00	0.21	0.21	0.00	0.16	0.00
Crit Moves:	****			****			****			****		
Green Time:	12.5	0.0	12.5	39.7	39.7	39.7	0.0	68.8	68.8	0.0	68.8	0.0
Volume/Cap:	0.40	0.00	0.40	0.15	0.40	0.40	0.00	0.40	0.40	0.00	0.30	0.00
Delay/Veh:	56.8	0.0	56.8	32.9	36.2	36.2	0.0	18.4	18.4	0.0	17.2	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:	56.8	0.0	56.8	32.9	36.2	36.2	0.0	18.4	18.4	0.0	17.2	0.0
LOS by Move:	E	A	E	C	D	D	A	B	B	A	B	A
DesignQueue:	5	0	5	4	12	12	0	14	14	0	11	0

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

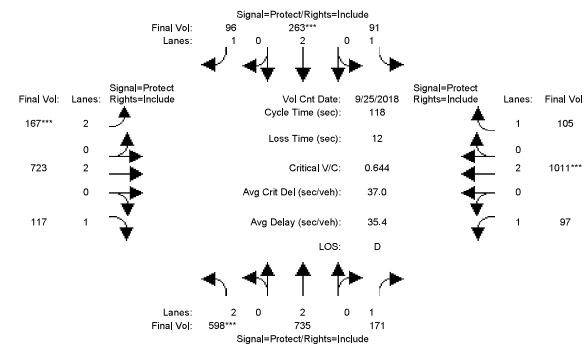
Intersection #3062: Capitol Av / Alum Rock Av



Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Min. Green:	7	10	10		7	10	10		7	10	10		7	10	10	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	
----- ----- ----- ----- -----																
Volume Module: >> Count Date: 25 Sep 2018 << 7:40-8:40AM																
Base Vol:	582	717	166		87	258	96		164	688	109		97	967	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:	582	717	166		87	258	96		164	688	109		97	967	101	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
PasserByVol:	0	0	0		0	0	0		0	0	0		0	0	0	
Initial Fut:	582	717	166		87	258	96		164	688	109		97	967	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:	582	717	166		87	258	96		164	688	109		97	967	101	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	582	717	166		87	258	96		164	688	109		97	967	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:	582	717	166		87	258	96		164	688	109		97	967	101	
----- ----- ----- ----- -----																
Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.83	1.00	0.92		0.92	1.00	0.92		0.83	1.00	0.92		0.92	1.00	0.92	
Lanes:	2.00	2.00	1.00		1.00	2.00	1.00		2.00	2.00	1.00		1.00	2.00	1.00	
Final Sat.:	3150	3800	1750		1750	3800	1750		3150	3800	1750		1750	3800	1750	

Capacity Analysis Mule:												
Vol/Sat:	0.18	0.19	0.09	0.05	0.07	0.05	0.05	0.18	0.06	0.06	0.25	0.06
Crit Moves:	****				****		****				****	
Green Time:	35.0	36.4	36.4	11.5	12.9	12.9	9.9	43.8	43.8	14.3	48.2	48.2
Volume/Cap:	0.62	0.61	0.61	0.51	0.62	0.50	0.62	0.49	0.17	0.46	0.62	0.14
Delay/Veh:	37.1	35.7	31.5	53.2	53.2	51.7	56.8	28.8	25.0	49.8	28.5	22.0
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:	37.1	35.7	31.5	53.2	53.2	51.7	56.8	28.8	25.0	49.8	28.5	22.0
LOS by Move:	D	D	C	D	D	D	E	C	C	D	C	C
Design/Queue:	17	17	8	6	8	6	6	15	5	6	20	4
Note: Queue reported is the number of cars per lane.												

Intersection #3062: Capitol Av / Alum Rock Av



Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	T	R		L	T	R		L	T	R		L	T	R	
Min. Green:	7	10	10		7	10	10		7	10	10		7	10	10	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	

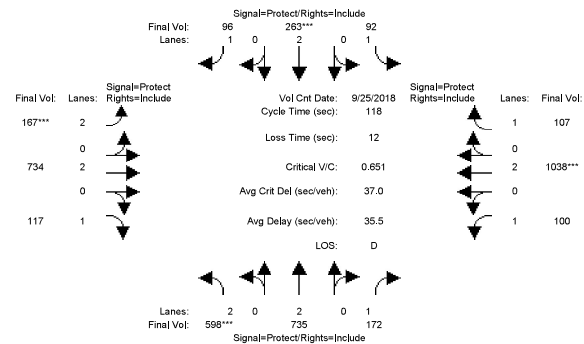
Volume Module:	>> Count Date: 25 Sep 2018 << 7:40-8:40AM															
Base Vol:	582	717	166		87	258	96		164	688	109		97	967	101	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Initial Bse:	582	717	166		87	258	96		164	688	109		97	967	101	
Added Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
ATI:	16	18	5		4	5	0		3	35	8		0	44	4	
Initial Fut:	598	735	171		91	263	96		167	723	117		97	1011	105	
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:	598	735	171		91	263	96		167	723	117		97	1011	105	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
Reduced Vol:	598	735	171		91	263	96		167	723	117		97	1011	105	
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:	598	735	171		91	263	96		167	723	117		97	1011	105	

Saturation Flow Module:																
Sat/Lane:	1900	1900	1900		1900	1900	1900		1900	1900	1900		1900	1900	1900	
Adjustment:	0.83	1.00	0.92		0.92	1.00	0.92		0.83	1.00	0.92		0.92	1.00	0.92	
Lanes:	2.00	2.00	1.00		1.00	2.00	1.00		2.00	2.00	1.00		1.00	2.00	1.00	
Final Sat.:	3150	3800	1750		1750	3800	1750		3150	3800	1750		1750	3800	1750	

Capacity Analysis Module:												
Vel/Sat:	0.19	0.19	0.10	0.05	0.07	0.05	0.05	0.19	0.07	0.06	0.27	0.06
Crit Moves:	****				****		****				****	
Green Time:	34.8	36.3	36.3	11.1	12.7	12.7	9.7	44.6	44.6	13.9	48.8	48.8
Volume/Cap:	0.64	0.63	0.32	0.55	0.64	0.51	0.64	0.50	0.18	0.47	0.64	0.15
Delay/Veh:	37.8	36.1	31.6	55.0	54.0	52.0	57.9	28.5	24.6	50.3	28.6	21.7
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:	37.8	36.1	31.6	55.0	54.0	52.0	57.9	28.5	24.6	50.3	28.6	21.7
LOS by Move:	D	D	C	D	D	D	E	C	C	D	C	C
DesignQueue:	18	18	9	6	8	6	6	16	5	6	21	4
Note: Queue reported is the number of cars per lane.												

2680 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2680 Alum Rock Avenue, San Jose, CA
Level of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj AM

Intersection #3062: Capitol Av / Alum Rock Av



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 25 Sep 2018 << 7:40-8:40AM												
Base Vol:	582	717	166	87	258	96	164	688	109	97	967	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:	582	717	166	87	258	96	164	688	109	97	967	101
Added Vol:	0	0	1	1	0	0	0	11	0	3	27	2
ATI:	16	18	5	4	5	0	3	35	8	0	44	4
Initial Fut:	598	735	172	92	263	96	167	734	117	100	1038	107
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	598	735	172	92	263	96	167	734	117	100	1038	107
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	598	735	172	92	263	96	167	734	117	100	1038	107
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:	598	735	172	92	263	96	167	734	117	100	1038	107

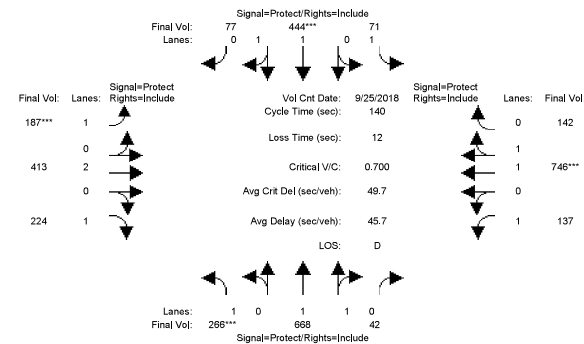
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.19	0.19	0.10	0.05	0.07	0.05	0.05	0.19	0.07	0.06	0.27	0.06
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	34.4	35.9	35.9	11.0	12.5	12.5	9.6	45.2	45.2	13.9	49.5	49.5
Volume/Cap:	0.65	0.64	0.32	0.56	0.65	0.52	0.65	0.50	0.17	0.49	0.65	0.15
Delay/Veh:	38.2	36.6	32.0	55.7	54.4	52.4	58.4	28.1	24.2	50.5	28.3	21.3
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:	38.2	36.6	32.0	55.7	54.4	52.4	58.4	28.1	24.2	50.5	28.3	21.3
LOS by Move:	D	D	C	E	D	D	E	C	C	D	C	C
DesignQueue:	18	18	9	6	8	6	6	16	5	6	21	4

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

2680 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2680 Alum Rock Avenue, San Jose, CA
Level of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing AM

Intersection #3065: White Road / Alum Rock Av



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 25 Sep 2018 << 7:25-8:25AM												
Base Vol:	266	668	42	71	444	77	187	413	224	137	746	142
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:	266	668	42	71	444	77	187	413	224	137	746	142
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	266	668	42	71	444	77	187	413	224	137	746	142
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:	266	668	42	71	444	77	187	413	224	137	746	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	266	668	42	71	444	77	187	413	224	137	746	142
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:	266	668	42	71	444	77	187	413	224	137	746	142

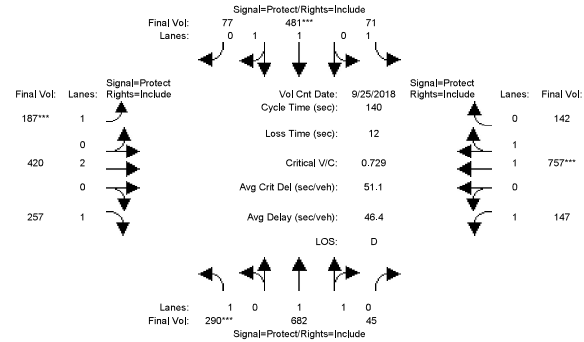
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	1.88	0.12	1.00	1.70	0.30	1.00	2.00	1.00	1.00	1.67	0.33
Final Sat.:	1750	3481	219	1750	3153	547	1750	3800	1750	1750	3108	592

Capacity Analysis Module:												
Vol/Sat:	0.15	0.19	0.19	0.04	0.14	0.14	0.11	0.11	0.13	0.08	0.24	0.24
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	30.4	46.5	46.5	12.1	28.2	28.2	21.4	43.1	43.1	26.3	48.0	48.0
Volume/Cap:	0.70	0.58	0.58	0.47	0.70	0.70	0.70	0.35	0.42	0.42	0.70	0.70
Delay/Veh:	56.3	39.3	39.3	63.2	55.0	55.0	64.3	37.8	39.0	50.9	41.5	41.5
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:	56.3	39.3	39.3	63.2	55.0	55.0	64.3	37.8	39.0	50.9	41.5	41.5
LOS by Move:	E	D	D	E	D	D	E	D	D	D	D	D
DesignQueue:	18	20	20	6	17	17	14	11	14	10	25	25

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

2680 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2680 Alum Rock Avenue, San Jose, CA
Level of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background AM

Intersection #3065: White Road / Alum Rock Av



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 25 Sep 2018 << 7:25-8:25AM												
Base Vol:	266	668	42	71	444	77	187	413	224	137	746	142
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:	266	668	42	71	444	77	187	413	224	137	746	142
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	24	14	3	0	37	0	0	7	33	10	11	0
Initial Fut:	290	682	45	71	481	77	187	420	257	147	757	142
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:	290	682	45	71	481	77	187	420	257	147	757	142
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	290	682	45	71	481	77	187	420	257	147	757	142
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:	290	682	45	71	481	77	187	420	257	147	757	142

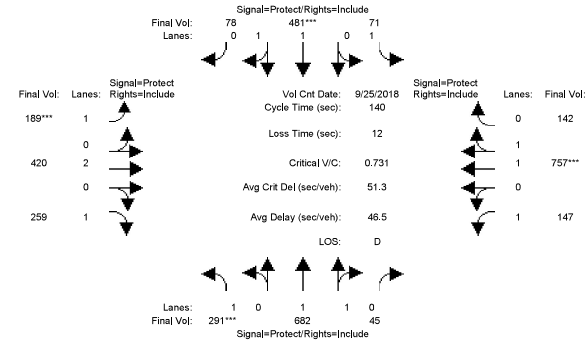
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	1.87	0.13	1.00	1.72	0.28	1.00	2.00	1.00	1.00	1.68	0.32
Final Sat.:	1750	3471	229	1750	3189	511	1750	3800	1750	1750	3115	584

Capacity Analysis Module:												
Vol/Sat:	0.17	0.20	0.20	0.04	0.15	0.15	0.11	0.11	0.15	0.08	0.24	0.24
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	31.8	48.5	48.5	12.3	29.0	29.0	20.5	42.7	42.7	24.5	46.7	46.7
Volume/Cap:	0.73	0.57	0.57	0.46	0.73	0.73	0.73	0.36	0.48	0.48	0.73	0.73
Delay/Veh:	56.8	37.8	37.8	62.8	55.4	55.4	67.2	38.2	40.3	53.3	43.3	43.3
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:	56.8	37.8	37.8	62.8	55.4	55.4	67.2	38.2	40.3	53.3	43.3	43.3
LOS by Move:	E	D	D	E	E	E	E	D	D	D	D	D
DesignQueue:	20	20	20	6	18	18	14	12	16	10	26	26

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

2680 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2680 Alum Rock Avenue, San Jose, CA
Level of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj AM

Intersection #3065: White Road / Alum Rock Av



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 25 Sep 2018 << 7:25-8:25AM												
Base Vol:	266	668	42	71	444	77	187	413	224	137	746	142
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:	266	668	42	71	444	77	187	413	224	137	746	142
Added Vol:	1	0	0	0	0	1	2	0	2	0	0	0
ATI:	24	14	3	0	37	0	0	7	33	10	11	0
Initial Fut:	291	682	45	71	481	78	189	420	259	147	757	142
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:	291	682	45	71	481	78	189	420	259	147	757	142
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	291	682	45	71	481	78	189	420	259	147	757	142
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:	291	682	45	71	481	78	189	420	259	147	757	142

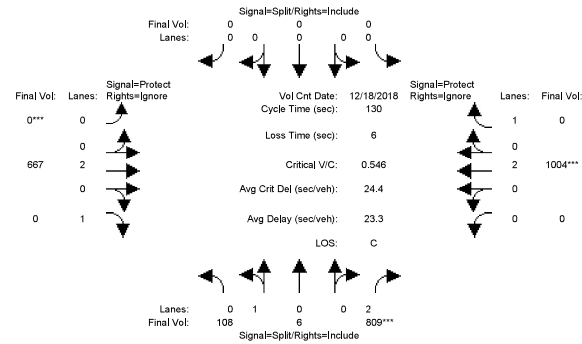
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	1.87	0.13	1.00	1.71	0.29	1.00	2.00	1.00	1.00	1.68	0.32
Final Sat.:	1750	3471	229	1750	3183	516	1750	3800	1750	1750	3115	584

Capacity Analysis Module:												
Vol/Sat:	0.17	0.20	0.20	0.04	0.15	0.15	0.11	0.11	0.15	0.08	0.24	0.24
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	31.8	48.5	48.5	12.3	28.9	28.9	20.7	42.9	42.9	24.3	46.5	46.5
Volume/Cap:	0.73	0.57	0.57	0.46	0.73	0.73	0.73	0.36	0.48	0.48	0.73	0.73
Delay/Veh:	56.9	37.9	37.9	62.9	55.5	55.5	67.2	38.1	40.2	53.4	43.5	43.5
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:	56.9	37.9	37.9	62.9	55.5	55.5	67.2	38.1	40.2	53.4	43.5	43.5
LOS by Move:	E	D	D	E	E	E	E	D	D	D	D	D
DesignQueue:	20	20	20	6	18	18	14	12	16	10	26	26

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

2880 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2880 Alum Rock Avenue, San Jose, CA
Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #3042: 680/ALUM ROCK (E)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 18 Dec 2018 << 4:30-5:30												
Base Vol:	108	6	809	0	0	0	0	667	143	0	1004	230
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:	108	6	809	0	0	0	0	667	143	0	1004	230
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	108	6	809	0	0	0	0	667	143	0	1004	230
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	108	6	809	0	0	0	0	667	0	0	1004	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	6	809	0	0	0	0	667	0	0	1004	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Final Volume:	108	6	809	0	0	0	0	667	0	0	1004	0

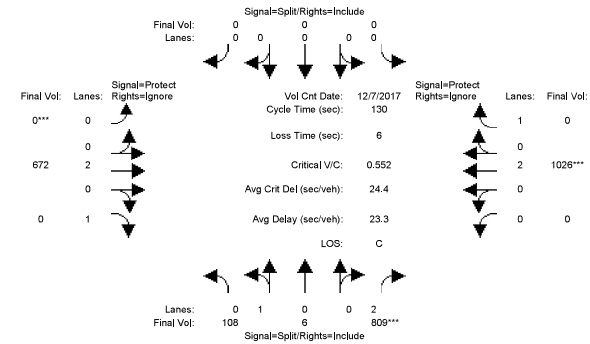
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.83	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.95	0.05	2.00	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	1705	95	3150	0	0	0	0	3800	1750	0	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.26	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.26	0.00
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	61.1	61.1	61.1	0.0	0.0	0.0	0.0	62.9	0.0	0.0	62.9	0.0
Volume/Cap:	0.13	0.13	0.55	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.55	0.00
Delay/Veh:	19.6	19.6	25.0	0.0	0.0	0.0	0.0	21.1	0.0	0.0	23.9	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:	19.6	19.6	25.0	0.0	0.0	0.0	0.0	21.1	0.0	0.0	23.9	0.0
LOS by Move:	B	B	C	A	A	A	A	C	A	A	C	A
DesignQueue:	5	5	20	0	0	0	0	13	0	0	20	0

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

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164 Residential Units + 7,500 SF of Retail
2880 Alum Rock Avenue, San Jose, CA
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2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #3042: 680/ALUM ROCK (E)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 7 Dec 2017 << 4:30-5:30												
Base Vol:	108	6	809	0	0	0	0	667	143	0	1004	230
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:	108	6	809	0	0	0	0	667	143	0	1004	230
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	5	1	0	22	4
Initial Fut:	108	6	809	0	0	0	0	672	144	0	1026	234
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	108	6	809	0	0	0	0	672	0	0	1026	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	6	809	0	0	0	0	672	0	0	1026	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Final Volume:	108	6	809	0	0	0	0	672	0	0	1026	0

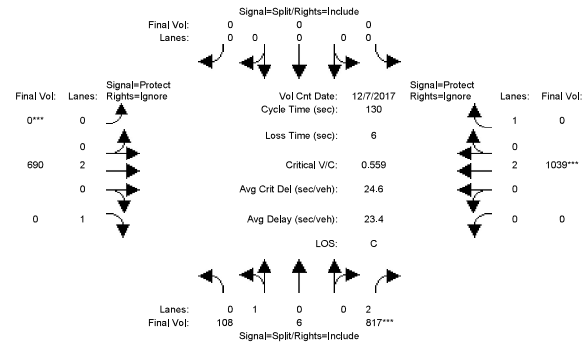
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.83	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.95	0.05	2.00	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	1705	95	3150	0	0	0	0	3800	1750	0	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.26	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.27	0.00
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	60.4	60.4	60.4	0.0	0.0	0.0	0.0	63.6	0.0	0.0	63.6	0.0
Volume/Cap:	0.14	0.14	0.55	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.55	0.00
Delay/Veh:	19.9	19.9	25.5	0.0	0.0	0.0	0.0	20.8	0.0	0.0	23.6	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:	19.9	19.9	25.5	0.0	0.0	0.0	0.0	20.8	0.0	0.0	23.6	0.0
LOS by Move:	B	B	C	A	A	A	A	C	A	A	C	A
DesignQueue:	5	5	20	0	0	0	0	13	0	0	20	0

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

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164 Residential Units + 7,500 SF of Retail
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2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj PM

Intersection #3042: 680/ALUM ROCK (E)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	0	0	0	0	10	10	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 7 Dec 2017 << 4:30-5:30												
Base Vol:	108	6	809	0	0	0	0	667	143	0	1004	230
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:	108	6	809	0	0	0	0	667	143	0	1004	230
Added Vol:	0	0	8	0	0	0	0	18	0	0	13	4
ATI:	0	0	0	0	0	0	0	5	1	0	22	4
Initial Fut:	108	6	817	0	0	0	0	690	144	0	1039	238
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
PHF Volume:	108	6	817	0	0	0	0	690	0	0	1039	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	108	6	817	0	0	0	0	690	0	0	1039	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Final Volume:	108	6	817	0	0	0	0	690	0	0	1039	0

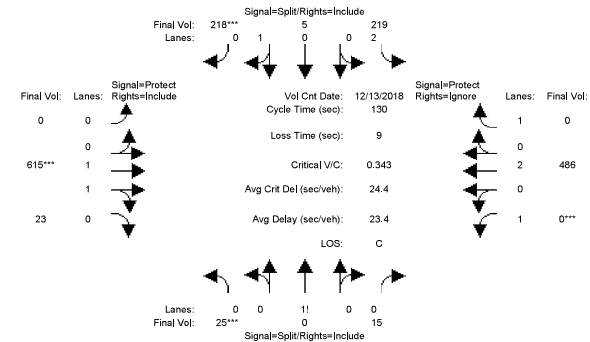
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.83	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	0.95	0.05	2.00	0.00	0.00	0.00	0.00	2.00	1.00	0.00	2.00	1.00
Final Sat.:	1705	95	3150	0	0	0	0	3800	1750	0	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.26	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.27	0.00
Crit Moves:	****			****			****			****		
Green Time:	60.4	60.4	60.4	0.0	0.0	0.0	0.0	63.6	0.0	0.0	63.6	0.0
Volume/Cap:	0.14	0.14	0.56	0.00	0.00	0.00	0.00	0.37	0.00	0.00	0.56	0.00
Delay/Veh:	20.0	20.0	25.7	0.0	0.0	0.0	0.0	20.8	0.0	0.0	23.7	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:	20.0	20.0	25.7	0.0	0.0	0.0	0.0	20.8	0.0	0.0	23.7	0.0
LOS by Move:	B	B	C	A	A	A	A	C	A	A	C	A
DesignQueue:	5	5	20	0	0	0	0	13	0	0	21	0

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

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164 Residential Units + 7,500 SF of Retail
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2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #3043: 680/ALUM ROCK (W)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	10	10	10	0	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Dec 2018 << 4:15-5:15												
Base Vol:	25	0	15	219	5	218	0	615	23	0	486	650
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:	25	0	15	219	5	218	0	615	23	0	486	650
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	25	0	15	219	5	218	0	615	23	0	486	650
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	25	0	15	219	5	218	0	615	23	0	486	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	0	15	219	5	218	0	615	23	0	486	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	25	0	15	219	5	218	0	615	23	0	486	0

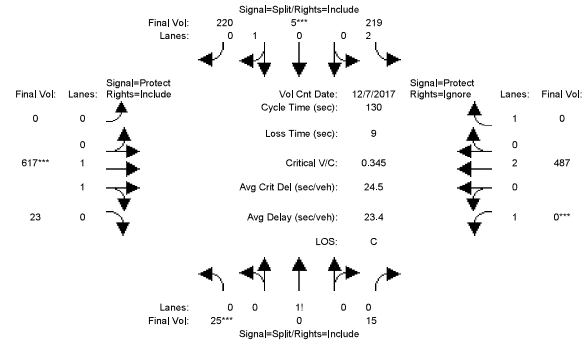
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.83	0.95	0.95	0.92	0.97	0.95	0.92	1.00	0.92
Lanes:	0.62	0.00	0.38	2.00	0.02	0.98	0.00	1.93	0.07	1.00	2.00	1.00
Final Sat.:	1094	0	656	3150	40	1760	0	3567	133	1750	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.02	0.07	0.12	0.12	0.00	0.17	0.17	0.00	0.13	0.00
Crit Moves:	****			****			****			****		
Green Time:	10.0	0.0	10.0	46.4	46.4	46.4	0.0	64.6	64.6	0.0	64.6	0.0
Volume/Cap:	0.30	0.00	0.30	0.19	0.35	0.35	0.00	0.35	0.35	0.00	0.26	0.00
Delay/Veh:	57.9	0.0	57.9	29.0	31.0	31.0	0.0	20.0	20.0	0.0	18.9	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:	57.9	0.0	57.9	29.0	31.0	31.0	0.0	20.0	20.0	0.0	18.9	0.0
LOS by Move:	E	A	E	C	C	C	A	B	B	A	B	A
DesignQueue:	3	0	3	6	11	11	0	12	12	0	9	0

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

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164 Residential Units + 7,500 SF of Retail
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2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #3043: 680/ALUM ROCK (W)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	10	10	10	0	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 7 Dec 2017 << 4:15-5:15												
Base Vol:	25	0	15	219	5	218	0	615	23	0	486	650
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:	25	0	15	219	5	218	0	615	23	0	486	650
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	2	0	2	0	0	1	0
Initial Fut:	25	0	15	219	5	220	0	617	23	0	487	650
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	25	0	15	219	5	220	0	617	23	0	487	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	0	15	219	5	220	0	617	23	0	487	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	25	0	15	219	5	220	0	617	23	0	487	0

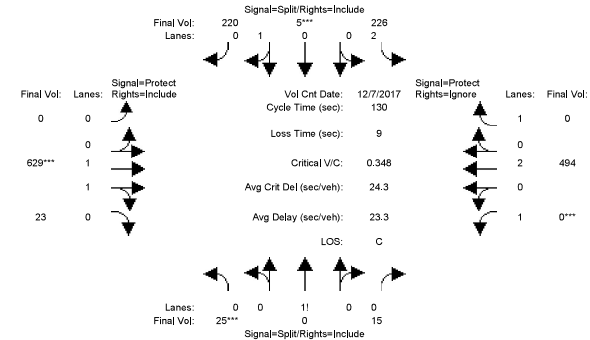
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.83	0.95	0.95	0.92	0.97	0.95	0.92	1.00	0.92
Lanes:	0.62	0.00	0.38	2.00	0.02	0.98	0.00	1.93	0.07	1.00	2.00	1.00
Final Sat.:	1094	0	656	3150	40	1760	0	3567	133	1750	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.02	0.07	0.13	0.13	0.00	0.17	0.17	0.00	0.13	0.00
Crit Moves:	****			****			****			****		
Green Time:	10.0	0.0	10.0	46.6	46.6	46.6	0.0	64.4	64.4	0.0	64.4	0.0
Volume/Cap:	0.30	0.00	0.30	0.19	0.35	0.35	0.00	0.35	0.35	0.00	0.26	0.00
Delay/Veh:	57.9	0.0	57.9	28.9	30.9	30.9	0.0	20.1	20.1	0.0	19.0	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:	57.9	0.0	57.9	28.9	30.9	30.9	0.0	20.1	20.1	0.0	19.0	0.0
LOS by Move:	E	A	E	C	C	C	A	C	C	A	B	A
DesignQueue:	3	0	3	6	11	11	0	13	13	0	9	0

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

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2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj PM

Intersection #3043: 680/ALUM ROCK (W)



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	10	0	10	10	10	10	0	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 7 Dec 2017 << 4:15-5:15												
Base Vol:	25	0	15	219	5	218	0	615	23	0	486	650
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:	25	0	15	219	5	218	0	615	23	0	486	650
Added Vol:	0	0	0	7	0	0	0	12	0	0	7	5
ATI:	0	0	0	0	0	2	0	2	0	0	1	0
Initial Fut:	25	0	15	226	5	220	0	629	23	0	494	655
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
PHF Volume:	25	0	15	226	5	220	0	629	23	0	494	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	0	15	226	5	220	0	629	23	0	494	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	0.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Final Volume:	25	0	15	226	5	220	0	629	23	0	494	0

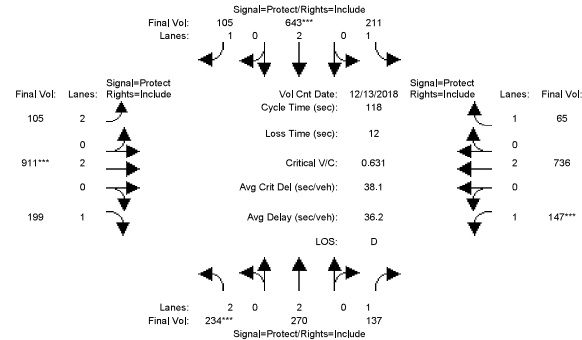
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.83	0.95	0.95	0.92	0.97	0.95	0.92	1.00	0.92
Lanes:	0.62	0.00	0.38	2.00	0.02	0.98	0.00	1.93	0.07	1.00	2.00	1.00
Final Sat.:	1094	0	656	3150	40	1760	0	3569	131	1750	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.02	0.00	0.02	0.07	0.13	0.13	0.00	0.18	0.18	0.00	0.13	0.00
Crit Moves:	****			****			****			****		
Green Time:	10.0	0.0	10.0	46.1	46.1	46.1	0.0	64.9	64.9	0.0	64.9	0.0
Volume/Cap:	0.30	0.00	0.30	0.20	0.35	0.35	0.00	0.35	0.35	0.00	0.26	0.00
Delay/Veh:	57.9	0.0	57.9	29.3	31.3	31.3	0.0	19.9	19.9	0.0	18.8	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:	57.9	0.0	57.9	29.3	31.3	31.3	0.0	19.9	19.9	0.0	18.8	0.0
LOS by Move:	E	A	E	C	C	C	A	B	B	A	B	A
DesignQueue:	3	0	3	6	11	11	0	13	13	0	9	0

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

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164 Residential Units + 7,500 SF of Retail
2680 Alum Rock Avenue, San Jose, CA
Level of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #3062: Capitol Av / Alum Rock Av



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Dec 2018 << 4:30-5:30PM												
Base Vol:	234	270	137	211	643	105	105	911	199	147	736	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	234	270	137	211	643	105	105	911	199	147	736	65
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	234	270	137	211	643	105	105	911	199	147	736	65
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	234	270	137	211	643	105	105	911	199	147	736	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	234	270	137	211	643	105	105	911	199	147	736	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	234	270	137	211	643	105	105	911	199	147	736	65

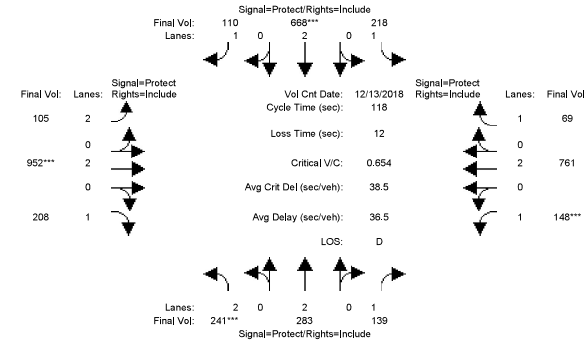
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.08	0.12	0.17	0.06	0.03	0.24	0.11	0.08	0.19	0.04
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	13.9	18.8	18.8	26.7	31.6	31.6	14.2	44.8	44.8	15.7	46.3	46.3
Volume/Cap:	0.63	0.45	0.49	0.53	0.63	0.22	0.28	0.63	0.30	0.63	0.49	0.09
Delay/Veh:	53.1	45.4	46.6	41.5	39.3	33.9	47.6	30.8	25.9	53.9	27.3	22.7
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:	53.1	45.4	46.6	41.5	39.3	33.9	47.6	30.8	25.9	53.9	27.3	22.7
LOS by Move:	D	D	D	D	D	D	C	D	C	D	C	C
DesignQueue:	8	8	8	12	16	6	4	20	9	9	15	3

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

2680 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2680 Alum Rock Avenue, San Jose, CA
Level of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #3062: Capitol Av / Alum Rock Av



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Dec 2018 << 4:30-5:30PM												
Base Vol:	234	270	137	211	643	105	105	911	199	147	736	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	234	270	137	211	643	105	105	911	199	147	736	65
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	7	13	2	7	25	5	0	41	9	1	25	4
Initial Fut:	241	283	139	218	668	110	105	952	208	148	761	69
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:	241	283	139	218	668	110	105	952	208	148	761	69
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	241	283	139	218	668	110	105	952	208	148	761	69
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:	241	283	139	218	668	110	105	952	208	148	761	69

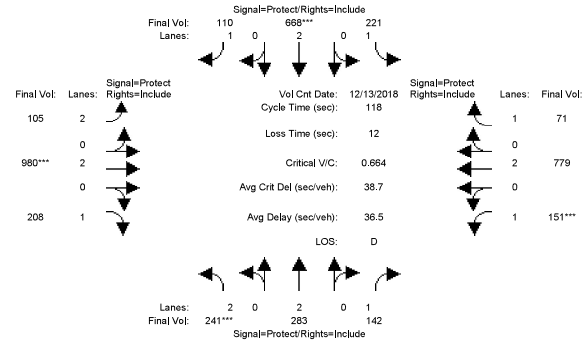
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.08	0.07	0.08	0.12	0.18	0.06	0.03	0.25	0.12	0.08	0.20	0.04
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	13.8	18.4	18.4	27.1	31.7	31.7	13.8	45.2	45.2	15.3	46.7	46.7
Volume/Cap:	0.65	0.48	0.51	0.54	0.65	0.23	0.28	0.65	0.31	0.65	0.51	0.10
Delay/Veh:	54.0	46.0	47.2	41.5	39.8	33.9	48.0	31.0	25.7	55.6	27.3	22.5
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:	54.0	46.0	47.2	41.5	39.8	33.9	48.0	31.0	25.7	55.6	27.3	22.5
LOS by Move:	D	D	D	D	D	D	C	D	C	D	C	C
DesignQueue:	9	8	9	12	17	6	4	21	9	9	16	3

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

2680 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2680 Alum Rock Avenue, San Jose, CA
Level of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj PM

Intersection #3062: Capitol Av / Alum Rock Av



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module: >> Count Date: 13 Dec 2018 << 4:30-5:30PM												
Base Vol:	234	270	137	211	643	105	105	911	199	147	736	65
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	234	270	137	211	643	105	105	911	199	147	736	65
Added Vol:	0	0	3	3	0	0	0	28	0	3	18	2
ATI:	7	13	2	7	25	5	0	41	9	1	25	4
Initial Fut:	241	283	142	221	668	110	105	980	208	151	779	71
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:	241	283	142	221	668	110	105	980	208	151	779	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	241	283	142	221	668	110	105	980	208	151	779	71
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:	241	283	142	221	668	110	105	980	208	151	779	71

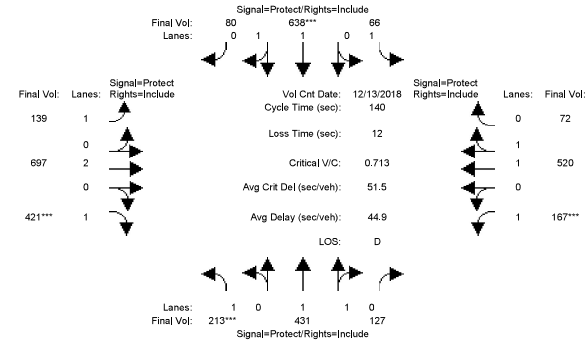
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.92	1.00	0.92	0.83	1.00	0.92	0.92	1.00	0.92
Lanes:	2.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	3150	3800	1750	1750	3800	1750	3150	3800	1750	1750	3800	1750

Capacity Analysis Module:												
Vol/Sat:	0.08	0.07	0.08	0.13	0.18	0.06	0.03	0.26	0.12	0.09	0.21	0.04
Crit Moves:	****			****			****			****		
Green Time:	13.6	18.0	18.0	26.8	31.2	31.2	13.7	45.8	45.8	15.3	47.4	47.4
Volume/Cap:	0.66	0.49	0.53	0.56	0.66	0.24	0.29	0.66	0.31	0.66	0.51	0.10
Delay/Veh:	54.6	46.4	48.2	42.0	40.4	34.3	48.1	30.9	25.3	56.1	26.8	22.1
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:	54.6	46.4	48.2	42.0	40.4	34.3	48.1	30.9	25.3	56.1	26.8	22.1
LOS by Move:	D	D	D	D	D	C	D	C	C	E	C	C
DesignQueue:	9	8	9	13	17	6	4	21	9	10	16	3

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

2680 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2680 Alum Rock Avenue, San Jose, CA
Level of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PM

Intersection #3065: White Road / Alum Rock Av



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0

Volume Module: >> Count Date: 13 Dec 2018 << 4:30-5:30PM												
Base Vol:	213	431	127	66	638	80	139	697	421	167	520	72
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:	213	431	127	66	638	80	139	697	421	167	520	72
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	213	431	127	66	638	80	139	697	421	167	520	72
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:	213	431	127	66	638	80	139	697	421	167	520	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	213	431	127	66	638	80	139	697	421	167	520	72
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:	213	431	127	66	638	80	139	697	421	167	520	72

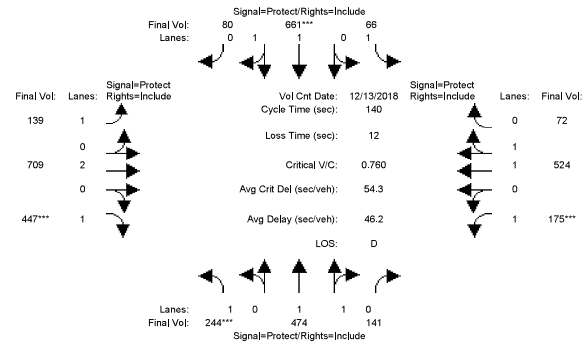
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	1.53	0.47	1.00	1.77	0.23	1.00	2.00	1.00	1.00	1.75	0.25
Final Sat.:	1750	2857	842	1750	3287	412	1750	3800	1750	1750	3250	450

Capacity Analysis Module:												
Vol/Sat:	0.12	0.15	0.15	0.04	0.19	0.19	0.08	0.18	0.24	0.10	0.16	0.16
Crit Moves:	****			****			****			****		
Green Time:	23.9	46.6	46.6	15.4	38.1	38.1	21.9	47.2	47.2	18.7	44.1	44.1
Volume/Cap:	0.71	0.45	0.45	0.34	0.71	0.71	0.51	0.54	0.71	0.71	0.51	0.51
Delay/Veh:	62.7	37.0	37.0	58.6	48.4	48.4	55.7	38.1	44.6	67.9	39.5	39.5
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:	62.7	37.0	37.0	58.6	48.4	48.4	55.7	38.1	44.6	67.9	39.5	39.5
LOS by Move:	E	D	D	E	D	D	E	D	D	E	D	D
DesignQueue:	15	15	15	5	22	22	10	19	25	13	17	17

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

2680 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2680 Alum Rock Avenue, San Jose, CA
Level of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PM

Intersection #3065: White Road / Alum Rock Av



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Dec 2018 << 4:30-5:30PM												
Base Vol:	213	431	127	66	638	80	139	697	421	167	520	72
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:	213	431	127	66	638	80	139	697	421	167	520	72
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	31	43	14	0	23	0	0	12	26	8	4	0
Initial Fut:	244	474	141	66	661	80	139	709	447	175	524	72
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:	244	474	141	66	661	80	139	709	447	175	524	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	244	474	141	66	661	80	139	709	447	175	524	72
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:	244	474	141	66	661	80	139	709	447	175	524	72

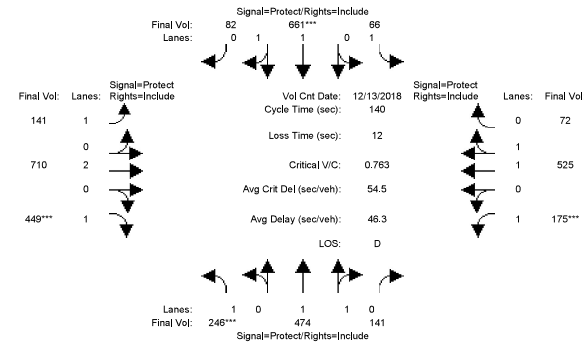
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	1.53	0.47	1.00	1.78	0.22	1.00	2.00	1.00	1.00	1.75	0.25
Final Sat.:	1750	2851	848	1750	3300	399	1750	3800	1750	1750	3253	447

Capacity Analysis Module:												
Vol/Sat:	0.14	0.17	0.17	0.04	0.20	0.20	0.08	0.19	0.26	0.10	0.16	0.16
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	25.7	48.1	48.1	14.5	36.9	36.9	21.6	47.0	47.0	18.4	43.8	43.8
Volume/Cap:	0.76	0.48	0.48	0.37	0.76	0.76	0.51	0.56	0.76	0.76	0.51	0.51
Delay/Veh:	64.4	36.5	36.5	59.7	51.0	51.0	56.1	38.5	47.2	72.4	39.8	39.8
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:	64.4	36.5	36.5	59.7	51.0	51.0	56.1	38.5	47.2	72.4	39.8	39.8
LOS by Move:	E	D	D	E	D	D	E	D	D	E	D	D
DesignQueue:	17	17	17	5	23	23	10	19	27	13	17	17

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

2680 Alum Rock Residential Mixed-Use Project
164 Residential Units + 7,500 SF of Retail
2680 Alum Rock Avenue, San Jose, CA
Level of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Bkgd+Proj PM

Intersection #3065: White Road / Alum Rock Av



Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 13 Dec 2018 << 4:30-5:30PM												
Base Vol:	213	431	127	66	638	80	139	697	421	167	520	72
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:	213	431	127	66	638	80	139	697	421	167	520	72
Added Vol:	2	0	0	0	0	2	2	1	2	0	1	0
ATI:	31	43	14	0	23	0	0	12	26	8	4	0
Initial Fut:	246	474	141	66	661	82	141	710	449	175	525	72
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:	246	474	141	66	661	82	141	710	449	175	525	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	246	474	141	66	661	82	141	710	449	175	525	72
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:	246	474	141	66	661	82	141	710	449	175	525	72

Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.95	0.92	0.98	0.95	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	1.00	1.53	0.47	1.00	1.77	0.23	1.00	2.00	1.00	1.00	1.75	0.25
Final Sat.:	1750	2851	848	1750	3291	408	1750	3800	1750	1750	3253	446

Capacity Analysis Module:												
Vol/Sat:	0.14	0.17	0.17	0.04	0.20	0.20	0.08	0.19	0.26	0.10	0.16	0.16
Crit Moves:	****	****	****	****	****	****	****	****	****	****	****	****
Green Time:	25.8	48.1	48.1	14.5	36.8	36.8	21.8	47.1	47.1	18.3	43.6	43.6
Volume/Cap:	0.76	0.48	0.48	0.36	0.76	0.76	0.52	0.56	0.76	0.76	0.52	0.52
Delay/Veh:	64.5	36.4	36.4	59.7	51.2	51.2	56.0	38.5	47.4	72.8	40.0	40.0
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:	64.5	36.4	36.4	59.7	51.2	51.2	56.0	38.5	47.4	72.8	40.0	40.0
LOS by Move:	E	D	D	E	D	D	E	D	D	E	D	D
DesignQueue:	18	17	17	5	23	23	10	19	27	13	17	17

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