APPENDIX H

LOCAL TRANSPORTATION ANALYSIS

HEXAGON TRANSPORTATION CONSULTANTS, INC.

70 N. 27th Street Residential

Local Transportation Analysis

Prepared for:

Starbird Consulting LLC

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Executive Summary

This report presents the results of the transportation analysis conducted for a proposed residential project at 70 N. 27th Street in San Jose, California. The project would demolish a partially occupied 21,454 square-foot (s.f.) two-story commercial building and construct a new building consisting of five floors of residential units (up to 200 units, including approximately 5% affordable units) over podium parking. The ground floor would provide 210 residential parking spaces in a three-level automated puzzle parking system. The project would provide direct access to the future Five Wounds Creek Trail. Vehicular access to the project site would be provided via two driveways on N. 27th Street (similar to the existing site layout).

This study was conducted for the purpose of identifying the potential transportation impacts and operational issues related to the proposed development. The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook,* adopted in April 2020. Based on the City of San Jose's Transportation Analysis Policy (Council Policy 5-1) and the *Transportation Analysis Handbook,* the study includes a non-CEQA local transportation analysis (LTA).

The LTA analyzes AM and PM peak hour traffic conditions for four signalized intersections and two unsignalized intersections in the vicinity of the project site. The LTA also includes an analysis of site access, on-site circulation, parking, vehicle queuing, and effects to transit services and bicycle and pedestrian access.

Vehicle Miles Traveled (VMT) Analysis

The City of San Jose's *Transportation Analysis Handbook, 2020* includes screening criteria for projects that are expected to result in a less-than-significant VMT impact based on the project description, characteristics and/or location. Projects that meet the screening criteria do not require a CEQA transportation analysis but are typically required to provide a Local Transportation Analysis (LTA) to identify potential operational issues that may arise due to the project. The project would meet the residential screening criteria set forth in the City's *Transportation Analysis Handbook.* Therefore, the residential project is exempt from preparing a detailed VMT analysis.

Cumulative Analysis

Developments within the Five Wounds Urban Village may include residential mixed-use projects with residential above retail. Residential projects that do not include a commercial component are not consistent with the *Urban Village* designation within the Five Wounds Urban Village.

The proposed project at 70 N. 27th Street consists of a high-density transit-oriented residential development, including an affordable housing component (approximately 5% affordable). The project

site is situated adjacent to the future Five Wounds Creek multi-use trail and is within walking distance of the future 28th Street/Little Portugal BART station. Additionally, the project is proposing a residential development density of 172 DU/AC (200 DU/1.16 AC = 172 DU/AC), which would meet the minimum development density of 35 DU/AC as defined in the City's screening criteria for VMT analysis and would be less than the maximum allowable density of 250 DU/AC as defined in the Five Wounds Urban Village Plan. However, the project does not propose to include any ground floor retail space. To address this inconsistency, the project is proposing a Density Bonus, which would eliminate the retail requirement within the Five Wounds Urban Village.

With the proposed Density Bonus, the project would be consistent with the Five Wounds Urban Village Plan and, thus, would conform to the General Plan. The residential 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.

Project Trip Generation

After applying the appropriate ITE trip rates, applicable trip adjustments and reductions, and existing trip credits, the proposed project is estimated to generate 636 new daily vehicle trips, with 46 new trips (24 inbound and 22 outbound) occurring during the AM peak hour and 30 new trips (12 inbound and 18 outbound) occurring during the PM peak hour.

Intersection Traffic Operations

Based on the City of San Jose intersection operations analysis criteria, none of the study intersections would be adversely affected by the project.

Other Transportation Issues

The proposed site plan shows generally adequate site access and on-site circulation. The project would not have an adverse effect on the existing pedestrian, bicycle or transit facilities in the study area. Below are recommendations resulting from the site plan review.

Recommendations

- If security gates are to be provided, keep the entry security gate open during the periods of the day when most inbound vehicle trips are likely to occur to avoid any inbound queuing issues.
- Establish no parking zones (at least 15 feet of red curb) immediately adjacent to the outbound project driveway to ensure adequate sight distance.
- Increase the southern east-west oriented drive aisle width from 22 feet to 24 feet.
- Verify the height limit of the vehicle stacker system would accommodate all possible resident vehicle types: passenger cars, trucks, SUVs and vans.
- Coordinate with City staff during the implementation phase to determine the appropriate location and size for an on-site or on-street freight loading area to serve the proposed residential project.
- Coordinate with the City of San Jose to ensure the site plan is consistent with the future alignment of the Five Wounds Creek Class I trail and future development associated with the BSV-BART 28th Street Station project.
- Coordinate with the VTA to ensure proper building shoring and foundation locations due to the project site being within the zone of influence of the BSV tunnel.

- Widen the proposed 6-foot-wide path on the south side of the building and 8-foot-wide path on the north side of the building to be at least 10 feet wide per the City of San Jose's Class I trail design standards. The future pedestrian connection should have a public access easement.
- Coordinate with City of San Jose staff to ensure the proposed residential development and the future Five Wounds Creek trail would have no conflicting design elements.
- Implement the planned multimodal improvements at the N. 27th Street/E. St. John Street intersection that are identified as a Connection to BART project in the East San Jose MTIP.
- Provide on-site EV parking spaces and EV Ready spaces to the satisfaction of the City of San Jose Planning Department.
- Provide on-site motorcycle parking to the satisfaction of the City of San Jose Planning Department.

1. Introduction

This report presents the results of the transportation analysis conducted for a proposed residential project at 70 N. 27th Street in San Jose, California (see Figure 1). The project would demolish a partially occupied 21,454 square-feet (s.f.) two-story commercial building and construct a new building consisting of five floors of residential units (up to 200 units, including approximately 5% affordable units) over podium parking. The ground floor would provide 210 residential parking spaces in a three-level automated puzzle parking system. The project would provide direct access to the future Five Wounds Creek Trail. Vehicular access to the project site would be provided via two driveways on N. 27th Street (similar to the existing site layout). The project site plan is shown on Figure 2.

This study was conducted for the purpose of identifying the potential transportation impacts and operational issues related to the proposed development. The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook,* adopted in April 2020. Based on the City of San Jose's Transportation Analysis Policy (Council Policy 5-1) and the *Transportation Analysis Handbook,* the study includes a non-CEQA local transportation analysis (LTA).

Transportation Policies

In adherence with State of California Senate Bill 743 (SB 743) and the City's goals as set forth in the Envision San Jose 2040 General Plan, the City of San Jose has adopted a new Transportation Analysis Policy, Council Policy 5-1. The Policy establishes the thresholds for transportation impacts under CEQA based on vehicle miles traveled (VMT) instead of intersection level of service (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. Council Policy 5-1 requires all projects to analyze transportation impacts using the VMT metric.

The Transportation Analysis Policy 5-1 aligns with the Envision San Jose 2040 General Plan which seeks to focus new development growth within Planned Growth Areas, bringing together office, residential, and service land uses to internalize trips and reduce VMT. VMT-based policies support dense, mixed-use, infill projects as established in the General Plan's Planned Growth Areas.

The project site is located within the Five Wounds BART Urban Village (i.e., planned growth area), according to the Envision San Jose 2040 General Plan. Urban Villages are walkable, bicycle-friendly, transit-oriented, mixed-use settings that provide high-density housing and promote job growth, thus supporting the General Plan's policies and goals. Projects that are located within an Urban Village boundary are eligible for a 20% parking reduction.

Figure 1
Site Location and Study Intersections

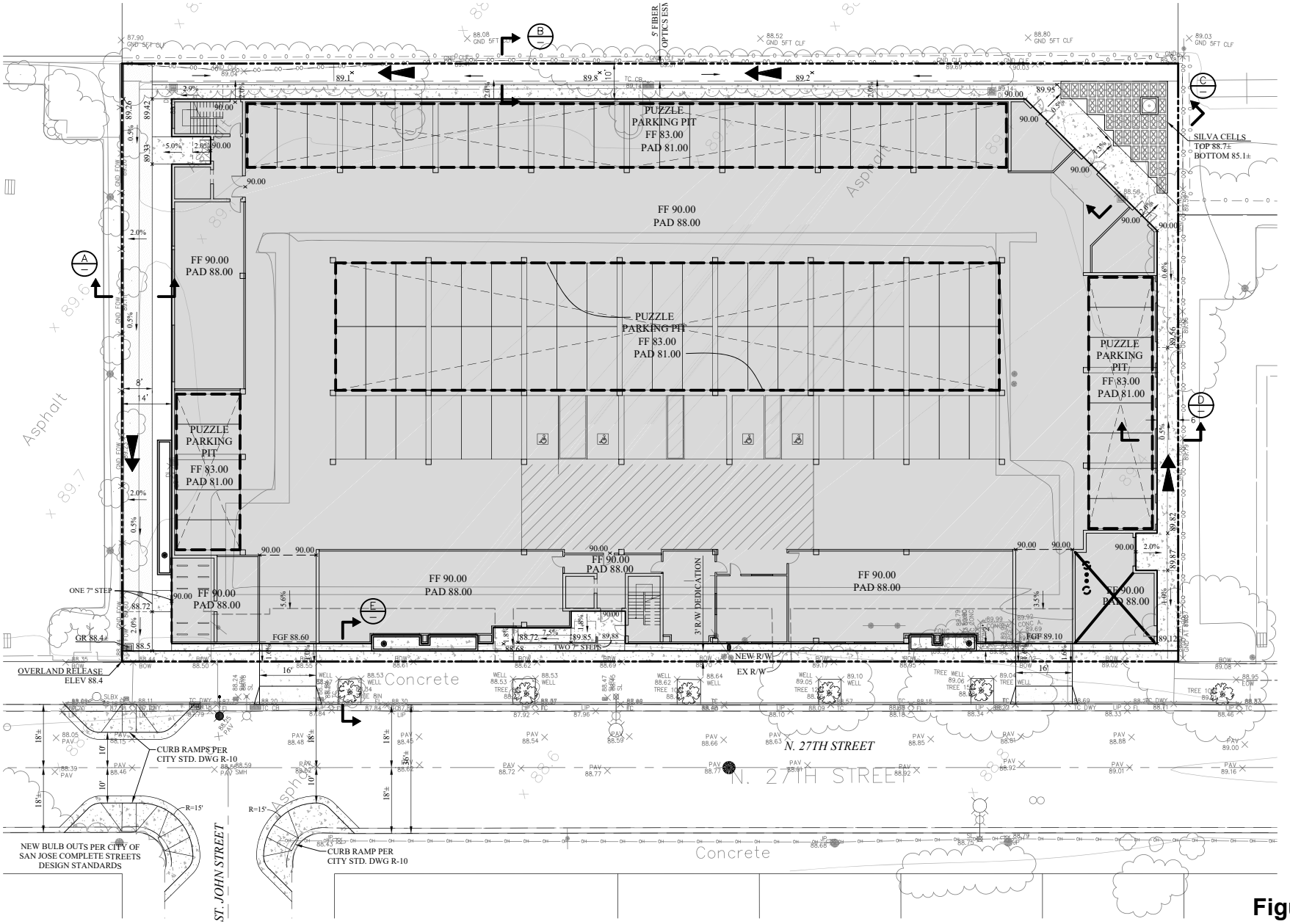

Figure 2
Site Plan

HEXAGON

NORTH
Not to Scale

The Envision San Jose 2040 General Plan contains policies to encourage the use of non-automobile transportation modes to minimize vehicle trip generation and reduce VMT, including the following:

- 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 transit hubs and stations to facilitate the use of 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 Exemption

The City of San Jose's Transportation Analysis Policy (Policy 5-1) establishes procedures for determining project impacts on VMT based on project description, characteristics, and/or location. The City of San Jose defines VMT as the total miles of travel by personal motorized vehicles a project is expected to generate in a day. VMT is calculated for residential, office, and industrial projects using the Origin-Destination VMT method, which measures the full distance of personal motorized vehicle-trips with one end within the project.

A project's VMT is compared to the appropriate thresholds of significance based on the project location and type of development. 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 VMT per worker. The thresholds of significance for development projects, as established in the

Transportation Analysis Policy, are based on the existing citywide average VMT level for residential uses and the existing regional average VMT level for employment uses.

To determine whether a project would result in CEQA transportation impacts related to VMT, the City has developed the San Jose VMT Evaluation Tool to streamline the analysis for residential, office, and industrial projects with local traffic. The tool estimates 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.

Figure 3 shows the current VMT levels estimated by the City for residents based on the locations of residences. Developments in the green-colored areas are estimated to have VMT levels that are below the thresholds of significance, while the yellow-colored areas are estimated to have VMT levels at the City average. The orange- and pink-colored areas are estimated to have VMT levels that are above the thresholds of significance. 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 strategies that would reduce the project VMT to the extent possible. The project is subject to the VMT screening criteria as described below.

Screening Criteria for VMT Analysis Exemption

The City of San Jose's *Transportation Analysis Handbook, 2020* includes screening criteria for projects that are expected to result in a less-than-significant VMT impact based on the project description, characteristics and/or location. The proposed residential project would meet the City's residential screening criteria. The City's screening criteria and an explanation of how the project satisfies the criteria are included in Chapter 3. Projects that meet the screening criteria do not require a CEQA transportation analysis (i.e., VMT analysis) but are typically required to provide a Local Transportation Analysis (LTA) to identify potential operational issues that may arise due to the project.

Local Transportation Analysis Scope

The non-CEQA Local Transportation Analysis (LTA) supplements the VMT analysis by identifying potential adverse operational effects that may arise due to a new development, as well as evaluating the effects of a new development on site access, on-site circulation, vehicle queuing, and transit, bicycle, and pedestrian facilities in the proximate area of the project. As part of the LTA, a project is generally required to conduct an intersection operations analysis if the project is expected to add 10 or more vehicle trips per hour per lane to any signalized intersection that is located within a half-mile of the project site. Based on these criteria, as outlined in the City's *Transportation Analysis Handbook,* a list of study intersections is then developed for the LTA. Note, however, that signalized intersections that do not meet all the criteria may still be added to the list of study intersections at the City's discretion. Unsignalized intersections may also be added; though, unlike signalized intersections, unsignalized intersections typically are not typically evaluated for level of service.

The LTA analyzes AM and PM peak hour traffic conditions for the following six intersections:

1. US 101 Northbound Ramps and Alum Rock Avenue – CMP intersection
2. US 101 Southbound Ramps and Santa Clara Street – CMP intersection
3. 28th Street and Santa Clara Street
4. 24th Street and Santa Clara Street
5. 27th Street and Santa Clara Street (unsignalized)
6. 27th Street and St. John Street (unsignalized)

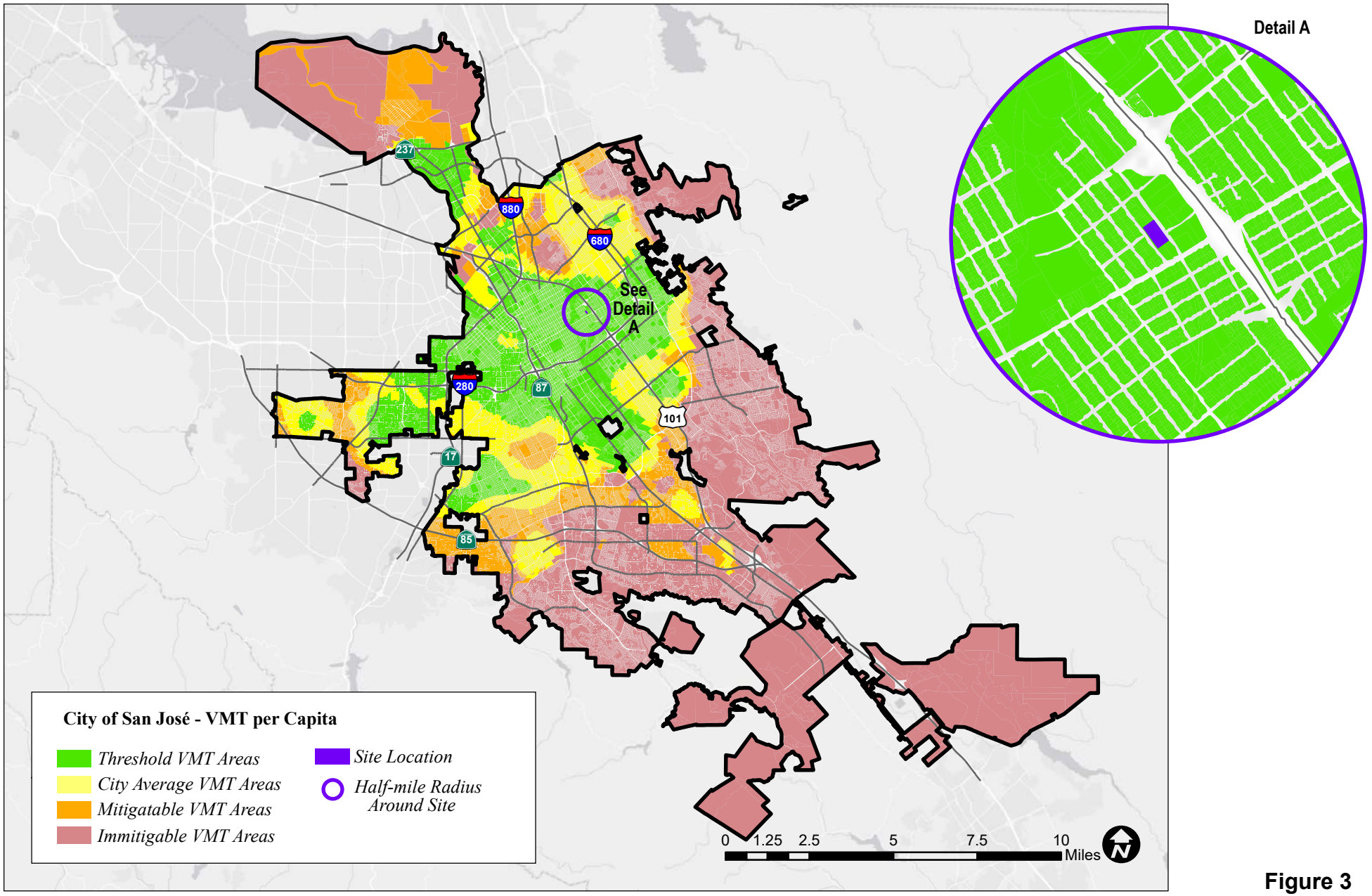

Figure 3
VMT Heat Map for Residents in San Jose

The list of study intersections was approved by City of San Jose staff. 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 typically occurs between 7:00 AM and 9:00 AM and the PM peak hour typically occurs between 4:00 PM and 6:00 PM on a regular weekday. It is during these periods that the most congested traffic conditions occur on a typical weekday. Traffic conditions were evaluated for the following scenarios:

- ***Existing Conditions.*** Existing AM and PM peak hour traffic volumes for the signalized study intersections were obtained from 2018 and 2019 counts. The 2018 and 2019 counts were provided by the City of San Jose and also obtained from the 2018 CMP Annual Monitoring Report. Note that although new 2022 traffic counts were collected at all the study intersections, the current traffic volumes in the study area have not yet returned to pre-pandemic levels, so the new counts were not used for the signalized intersections. The new 2022 counts were used for the unsignalized intersections, however, since historical count data is not available for unsignalized intersections.
- ***Background Conditions*.** Background traffic volumes were estimated by adding to existing peak hour volumes the projected volumes from approved but not yet completed or occupied developments. The added traffic from approved but not yet completed or occupied 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 A.
- ***Background Plus Project Conditions.*** Project conditions reflect traffic volumes with completion of the project and approved developments. Project traffic volumes were estimated by adding to background traffic volumes the additional trips generated by the project.
- ***Cumulative Conditions.*** Cumulative traffic volumes were estimated by adding to existing volumes the ATI provided by City staff, project-generated trips, and trips generated by pending developments in the study area. For the purpose of this study, cumulative traffic volumes include traffic generated by the following nearby pending projects: 1298 Tripp Avenue residential mixed-use project, 1347 E. Julian Street residential mixed-use project, and 1325 E. Julian Street residential mixed-use project. This traffic scenario is provided for informational purposes at the request of the City of San Jose.

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 study were obtained from new 2022 traffic counts, the City of San Jose (2018 and 2019 counts), the 2018 CMP Annual Monitoring Report, and field observations. The following data were collected from these sources:

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

Analysis Methodologies and Level of Service Standards

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.

City of San Jose Signalized Intersections

The City of San Jose level of service methodology for signalized intersections is the 2000 *Highway Capacity Manual* (HCM) method. This method is applied using the TRAFFIX software. The 2000 HCM operations method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. The City of San Jose level of service standard for the City's signalized intersections is LOS D or better. The correlation between average control delay and level of service is shown in Table 1.

Table 1
Signalized Intersection Level of Service Definitions Based on Average 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).

CMP Signalized Intersections

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

Unsignalized Intersections

Two of the study intersections are unsignalized. The City of San Jose has not established a level of service standard for unsignalized intersections. The need for signalization of unsignalized intersections is assessed based on the Peak Hour Volume Warrant (Warrant 3) described in the *Manual on Uniform Traffic Control Devices (MUTCD)*. This method makes no evaluation of intersection level of service, but simply provides an indication whether vehicular peak hour traffic volumes are, or would be, sufficient to justify installation of a traffic signal. Intersections that meet the peak hour warrant are subject to further analysis before determining that a traffic signal is necessary. Additional analysis may include unsignalized intersection level of service analysis and/or operations analysis such as evaluating vehicle queuing and delay. Other types of traffic control devices, signage, or geometric changes may be preferable based on existing field conditions and intersection spacing.

Adverse Intersection Operations Effects

According to the City of San Jose's *Transportation Analysis Handbook, 2020*, an adverse effect on signalized 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 is 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.

Intersection Vehicle Queuing Analysis

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

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

Where:

P (x=n) = probability of "n" vehicles in queue per lane
n = number of vehicles in the queue per lane
λ = average # of vehicles in the queue per lane (vehicles per hr per lane/signal cycles per hr)

The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95th percentile maximum number of queued vehicles for a particular left-turn movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the left-turn movement. This analysis thus provides a basis for estimating future turn pocket storage requirements at intersections.

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

US 101/Oakland/Mabury Transportation Development Policy

The City of San Jose has identified operational problems along the Oakland Road corridor at the US 101 interchange, which are due primarily to the capacity constraints of the interchange. As a result, the City has identified two key capital improvement projects: 1) modification of the US 101/Oakland Road interchange, including improvements to the Oakland Road/Commercial Street intersection, and 2) construction of a new US 101/Mabury Road interchange. To fund these interchange improvements, the City has developed the US 101/Oakland/Mabury Transportation Development Policy (TDP).

As part of the Policy, a fee to fund the planned interchange improvements has been adopted. Any project that would add traffic to the US 101/Oakland Road interchange is required to participate in the TDP program. The fee for the US 101/Oakland/Mabury TDP is based on the number of PM peak hour vehicular trips that a project would add to the interchange. The 2023 TDP traffic impact fee is $48,226 per each new PM peak hour vehicle trip that would be added to the interchange. This fee is subject to an annual escalation on January 1st per the Engineering News-Record Construction Cost Index for San Francisco.

Based on the project site's proximity to the US 101/Santa Clara Street-Alum Rock Avenue interchange (1/4-mile from the site) and the project trip distribution patterns discussed in Chapter 3, it is reasonable to assume that the project would not add vehicle trips to the US 101/Oakland Road interchange (2.5-mile drive from the site). Therefore, the project would not be required to pay the TDP impact fee.

Report Organization

This report has a total of five chapters. Chapter 2 describes the existing roadway network, transit services, and bicycle and pedestrian facilities. Chapter 3 describes the CEQA transportation analysis exemption criteria. Chapter 4 describes the local transportation analysis (LTA) including the method by which project traffic is estimated, intersection operations analysis, any adverse intersection operations effects caused by the project, intersection vehicle queuing analysis, site access and on-site circulation review, effects on bicycle, pedestrian, and transit facilities, and parking. Chapter 5 presents the conclusions of the local transportation analysis.

2. Existing Transportation Conditions

This chapter describes the existing conditions of the transportation system within the study area of the project. It describes transportation facilities in the vicinity of the project site, including the roadway network, transit service, and pedestrian and bicycle facilities. The analysis of existing intersection operations is included as part of the Local Transportation Analysis (see Chapter 3).

Existing Roadway Network

Regional access to the project site is provided via US 101. Local access to the project site is provided via Alum Rock Avenue, Santa Clara Street, 24th Street, and 27th Street. These facilities 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.

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. West of the I-680 interchange, Alum Rock Avenue has a posted speed limit of 30 mph and 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 bicycle facilities. Curb parking is prohibited along most segments of Alum Rock Avenue. Alum Rock Avenue provides access to the project site via its transition to Santa Clara Street.

Santa Clara Street is a four-lane east-west Grand Boulevard that extends from US 101 westward through Downtown San Jose. West of Montgomery/Autumn Street, Santa Clara Street becomes The Alameda and extends into the City of Santa Clara. East of US 101, Santa Clara Street becomes Alum Rock Avenue. Santa Clara Street has sidewalks on both sides of the street but has no bicycle facilities. Santa Clara Street has a posted speed limit of 25 mph and provides access to and from the project site via 27th Street.

24th Street is a two-lane north-south local street with a posted speed limit of 25 mph. It extends from Julian Street southward to William Street, where it becomes McLaughlin Avenue. McLaughlin Avenue is a four-lane north-south City Connector Street (south of I-280) that begins at William Street and extends southward to Tuers Road, just south of Yerba Buena Road. McLaughlin Avenue provides access to westbound I-280 and from eastbound I-280 via a partial interchange. 24th Street has sidewalks on both sides of the street and is a designated bike route (contains sharrows). 24th Street provides access to the project site via its intersection with Santa Clara Street.

27th Street is a two-lane undivided local street that runs north to south between Santa Clara Street and Julian Street. 27th Street has a posted speed limit of 25 mph and curb parking is allowed on both sides of the street. 27th Street has sidewalks on both sides of the street but has no bicycle facilities. 27th Street provides direct access to the project site.

Existing Intersection Lane Configurations

The existing lane configurations at the study intersections were determined by observations in the field and are shown on Figure 4.

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 bicycle, pedestrian and transit facilities in the study area are described below.

Existing Pedestrian Facilities

Pedestrian facilities in the project area consist primarily of sidewalks along the streets and crosswalks with pedestrian signal heads at intersections. Sidewalks are found along all previously described local roadways in the study area. The existing network of sidewalks and crosswalks provides adequate 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 with truncated domes are also provided at all the intersections near the site, including Santa Clara Street and 27th Street. Truncated domes are the standard ADA design requirement for detectable warnings which enable people with visual disabilities to determine the boundary between the sidewalk and the street.

Existing Bicycle Facilities

In the project area, Class II striped bike lanes are present on 21st Street south of Santa Clara Street, San Antonio Street east of 28th Street, and King Road south of McKee Road. 24th Street, 33rd Street, and San Antonio Street are all designated bike routes and contain sharrows (see Figure 5).

Existing Transit Services

Existing bus service in the project vicinity is provided by the Santa Clara Valley Transportation Authority (VTA). The project area is served by frequent bus routes 22, 23, 64A, 64B, and Rapid 522. Bus routes 22 and 23 stop within walking distance of the project site on Santa Clara Street (see Figure 6). The three existing bus stops within walking distance of the project site include shelters with benches.

Local Route 22 provides service between the Palo Alto Transit Center and the Eastridge Transit Center. Route 22 operates along Santa Clara Street in the project study area, with 15-minute headways during the weekday peak commute hours. Bus stops are located on Santa Clara Street within walking distance of the project site at 26th Street, 27th Street, and 28th Street.

Local Route 23 provides service between De Anza College and the Alum Rock Transit Center. Route 23 operates along Santa Clara Street in the project study area, with 15-minute headways during the weekday peak commute hours. Bus stops are located on Santa Clara Street within walking distance of the project site at 26th Street, 27th Street, and 28th Street.

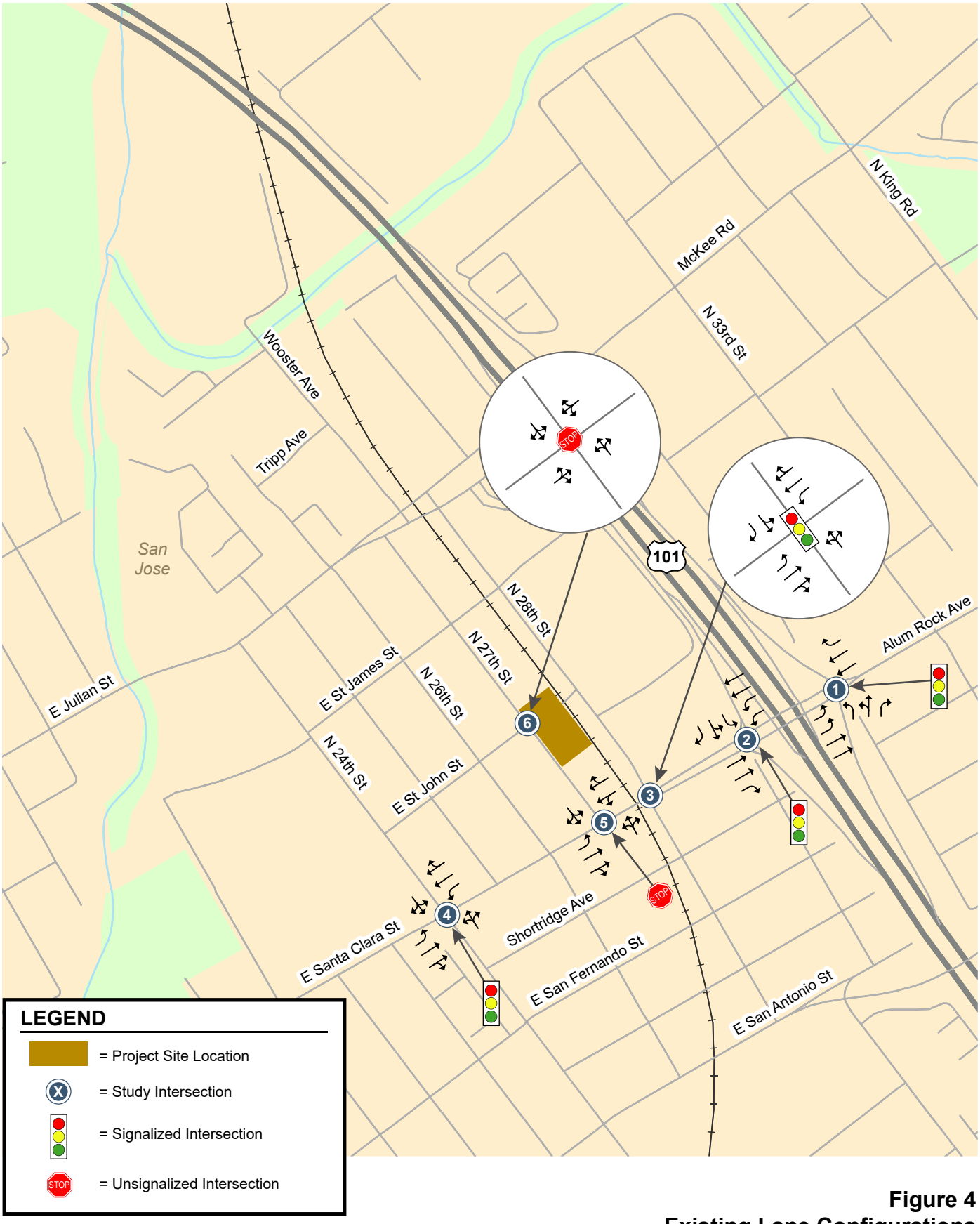

Figure 4
Existing Lane Configurations

Figure 5
Existing Bicycle Facilities

Figure 6
Existing Transit Services

Local Route 64A provides service between the Ohlone-Chynoweth LRT Station and the McKee Road/White Road intersection. Route 64A operates along Julian Street/McKee Road in the project study area, with 30-minute headways during the weekday commute hours. The closest bus stops are located at the Julian Street/26th Street intersection, approximately ¼ mile north of the project site.

Local Route 64B provides service between the Almaden Expressway/Camden Avenue intersection and the McKee Road/White Road intersection. Route 64B operates along Julian Street/McKee Road in the project study area, with 30-minute headways during the weekday commute hours. The closest bus stops are located at the Julian Street/26th Street intersection, approximately ¼ mile north of the project site.

Rapid Route 522 provides Bus Rapid Transit (BRT) service between the Palo Alto Transit Center and the Eastridge Transit Center. East of US 101, Route 522 runs within the median transit lanes along Alum Rock Avenue, with 15-minute headways during the weekday peak commute hours. The closest bus stops are located at the 24th Street/Santa Clara Street intersection, approximately ¼ mile west of the project site.

Observed Existing Traffic Conditions

Traffic conditions were observed in the field to identify any existing operational deficiencies occurring within an approximately ½-mile radius of the project site. Overall, the study intersections operated well during both the AM and PM peak commute periods. No noteworthy operational issues were observed during the field observation periods.

3. CEQA Transportation Analysis Exemption

This chapter describes the CEQA transportation analysis exemption criteria set forth in the City of San Jose's *Transportation Analysis Handbook, 2020* for projects that are expected to result in a less-than-significant VMT impact based on the project description, characteristics and/or location. Projects that meet the screening criteria do not require a CEQA-level transportation analysis. The City's screening criteria for residential projects and an explanation of how the project would satisfy the criteria are described in this chapter. Also included is a cumulative transportation impact analysis used to determine the project's consistency with the City of San Jose's General Plan.

The City's screening criteria set forth in the *Transportation Analysis Handbook* for residential projects are described below.

Screening Criteria for Residential Projects

1. **Planned Growth Areas**: Located within a Planned Growth Area as defined in the Envision San Jose 2040 General Plan; and
2. **High-Quality Transit**: Located within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor; and
3. **Low VMT Areas**: Located in an area in which the per-capita VMT is less than or equal to the CEQA significance threshold for the land use; and
4. **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 0.75 FAR or 35 units per acre, the maximum density allowed in the Planned Growth Area must be met; and
5. **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
6. **Active Transportation**: Not negatively impact transit, bike or pedestrian infrastructure.

The residential project would meet all the above criteria as follows:

- Is located within a Planned Growth Area (based on VMT Evaluation Tool) = Criterion 1 met;
- Is located within ½-mile of high-quality transit (future 28th Street/Little Portugal BART station) = Criterion 2 met;

- Is located in an area in which the per-capita VMT is less than or equal to the CEQA significance threshold = Criterion 3 met;
- Would have a residential density of 172 DU/AC (200 DU / 1.16 AC = 172 DU/AC) = Criterion 4 met;
- Would provide the minimum amount of parking required = Criterion 5 met; and
- Would not negatively impact transit, bike or ped infrastructure = Criterion 6 met.

Since the project would meet the residential screening criteria, no CEQA Transportation Analysis (i.e., VMT analysis) is required. Appendix E contains the VMT Evaluation Tool Summary Report for informational purposes.

Cumulative Analysis (Compliance with the General Plan)

Projects must demonstrate consistency with the Envision San Jose 2040 General Plan to address potential cumulative impacts. Consistency with the City's General Plan is based on the project's density, design, and conformance to the General Plan goals and policies. If a project is determined to be inconsistent with the General Plan, a cumulative impact analysis is required as part of the City's *Transportation Analysis Handbook*.

According to the Envision San Jose 2040 General Plan, the project site is designated as *Urban Village* and is located within the Five Wounds Urban Village. Considered a Regional Transit Urban Village, the Five Wounds Urban Village Plan supports high density, mixed-use residential/commercial development. Within the Five Wounds Urban Village, the *Urban Village* designation is a commercial designation that also allows residential uses (up to a density of 250 DU/AC) in a mixed-use format. Developments within this Urban Village may include residential mixed-use projects with residential above retail. Residential projects that do not include a commercial component are not consistent with the *Urban Village* designation within the Five Wounds Urban Village.

The proposed project at 70 N. 27th Street consists of a high-density transit-oriented residential development, including an affordable housing component (approximately 5% affordable). The project site is situated adjacent to the future Five Wounds Creek multi-use trail and is within walking distance of the future 28th Street/Little Portugal BART station. Additionally, the project is proposing a residential development density of 172 DU/AC (200 DU/1.16 AC = 172 DU/AC), which would meet the minimum development density of 35 DU/AC as defined in the City's screening criteria for VMT analysis and would be less than the maximum allowable density of 250 DU/AC as defined in the Five Wounds Urban Village Plan. However, the project does not propose to include any ground floor retail space. To address this inconsistency, the project is proposing a Density Bonus, which would eliminate the retail requirement within the Five Wounds Urban Village.

With the proposed Density Bonus, the project would be consistent with the Five Wounds Urban Village Plan and, thus, would conform to the General Plan. The residential 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 (LTA) including the method by which project traffic is estimated, intersection operations analysis, any adverse effects to intersection level of service caused by the project, intersection vehicle queuing analysis, site access and on-site circulation review, effects on bicycle, pedestrian and transit facilities, and parking.

Intersection Operations Analysis

The intersection operations analysis is intended to quantify the operations of the study intersections and to identify potential negative 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. It is assumed in this analysis that the future transportation network with the project would be the same as the existing transportation network.

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

Trips generated by any new development are typically estimated based on counts of existing developments of the same land use type. A compilation of typical trip generation rates can be found in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual.* Project trip generation was estimated by applying to the size and use of the proposed development the appropriate trip generation rates obtained from the ITE *Trip Generation Manual, 11th Edition* (2021).

Trips that would be generated by the residential project were estimated using the ITE average trip rates for "Multifamily Housing Mid-Rise Close to Rail Transit" (ITE Land Use 221) located in a General Urban/Suburban setting. This rate was used because the residential building would have a height of between 4 and 10 floors and would be situated within ½-mile of the future 28th Street/Little Portugal BART Station.

Trip Adjustments and Reductions

In accordance with San Jose's *Transportation Analysis Handbook* (April 2020, Section 4.8, "Intersection Operations Analysis"), the project is eligible for adjustments and reductions from the baseline trip generation described above. The applicable trip adjustments and reductions are described below.

Location-Based Trip Adjustment

Based on the 2020 San Jose guidelines, the project qualifies for a location-based adjustment. The location-based adjustment reflects the project's vehicle mode share based on the "place type" in which the project is located as per the San Jose Travel Demand Model. The project's place type was obtained from the San Jose VMT Evaluation Tool and is based on existing conditions (i.e., the current place type does not consider the future 28th Street/Little Portugal BART station). Based on the tool, the project site is located within the place type "Urban Low Transit" (see VMT Evaluation Tool Summary Report in Appendix E). Therefore, the baseline project trips were adjusted to reflect the corresponding mode share. Residential developments within Urban Low Transit areas have a vehicle mode share of 87% (according to Table 6 of the City's *Transportation Analysis Handbook*). Thus, a 13% reduction was applied to the project trip generation estimates based on the location-based vehicle mode share outputs produced from the San Jose Travel Demand Model. The 13% trip reduction is based on the percent of mode share for other modes of travel besides motor vehicles.

Project-Specific Residential Trip Reduction

According to the *Transportation Analysis Handbook*, the VMT reduction resulting from the project characteristics and implementing any VMT reduction strategies in the evaluation tool should be included as part of the trip generation estimates. It is assumed that every percent reduction in VMT per capita is equivalent to one percent reduction in peak hour vehicle trips. The VMT Evaluation Tool calculated a 3% external trip reduction. This trip reduction reflects the project characteristics including increases in residential density for the site.

Existing Trip Credits

Trips that are generated by existing occupied uses can be subtracted from the gross project trip generation estimates. Accordingly, trip credits were applied to account for the commercial building that would be removed as part of the project. The trip credits are based on trip generation counts of the existing occupied commercial uses conducted on May 10, 2022. The existing driveway count data are contained in Appendix F.

Net Project Trips

After applying the appropriate ITE trip rates, applicable trip adjustments and reductions, and existing trip credits described above, the proposed residential project is estimated to generate 636 new daily vehicle trips, with 46 new trips (24 inbound and 22 outbound) occurring during the AM peak hour and 30 new trips (12 inbound and 18 outbound) occurring during the PM peak hour (see Table 2).

Table 2
Project Trip Generation Estimates

Land Use	Size	Daily Rate	Daily Trips	AM Peak Hour Pk-Hr Rate	AM In	AM Out	AM Total	PM Peak Hour Pk-Hr Rate	PM In	PM Out	PM Total
Proposed Uses											
Multifamily Housing [1]	200 DU	4.75	950	0.32	36	28	64	0.29	25	33	58
Location-Based Vehicle Mode Share (13%) [2]			*(124)*		*(4)*	*(4)*	*(8)*		*(4)*	*(4)*	*(8)*
Project-Specific Trip Reduction (3%) [3]			*(25)*		*(1)*	*(1)*	*(2)*		*(1)*	*(1)*	*(2)*
Gross New Trips:			**801**		**31**	**23**	**54**		**20**	**28**	**48**
Existing Uses (To Be Removed)											
Commercial Building [4]			(165)		(7)	(1)	(8)		(8)	(10)	(18)
Net New Trips:			**636**		**24**	**22**	**46**		**12**	**18**	**30**

Notes:
[1] Trip generation based on average rates contained in the *ITE Trip Generation Manual, 11th Edition*, for Multifamily Housing Mid-Rise Close to Rail Transit (Land Use 221) located in a General Urban/Suburban setting. Rates are expressed in trips per dwelling unit (DU).

[2] A 13% trip reduction was applied based on the location-based vehicle mode share % outputs (Table 6 of the City's *Transportation Analysis Handbook*) produced from the San Jose Travel Demand Model for the place type Urban Low Transit. The 13% reduction is based on the % mode share for other modes of travel besides autos.

[3] A 3% trip reduction was applied based on the external trip adjustments obtained from the City's VMT Evaluation Tool.

[4] The AM and PM peak hour trips generated by the existing commercial building to be removed are based on driveway counts conducted on May 10, 2022. Existing daily trips were estimated.

Trip Distribution and Assignment

The project trip distribution pattern was estimated based on existing residential travel patterns on the surrounding roadway network that reflect typical weekday AM and PM commute patterns, the locations of complementary land uses, 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 pattern.

Figure 7 shows the residential project trip distribution pattern and gross trip assignment. Figure 8 shows the existing trip credits based on the driveway counts. Figure 9 shows the net project trip assignment at the study intersections.

Approximately 75 percent of inbound project trips would approach from the south via Santa Clara Street, and 25 percent would approach from the north via Julian Street. Since the majority of project-generated trips would originate from the south, very few inbound vehicle trips (7 AM peak hour trips and 4 PM peak hour trips) would pass through the mixed-use portion of the neighborhood north of the project site. Note that N. 27th Street contains a mix of residential and commercial uses along its entirety (between Santa Clara and Julian Streets). The land uses along 24th, 25th and 26th Streets west of the project site are almost entirely residential uses. The project would not add trips through the residential neighborhood to the west. Accordingly, the project would not result in any “cut-through” traffic.

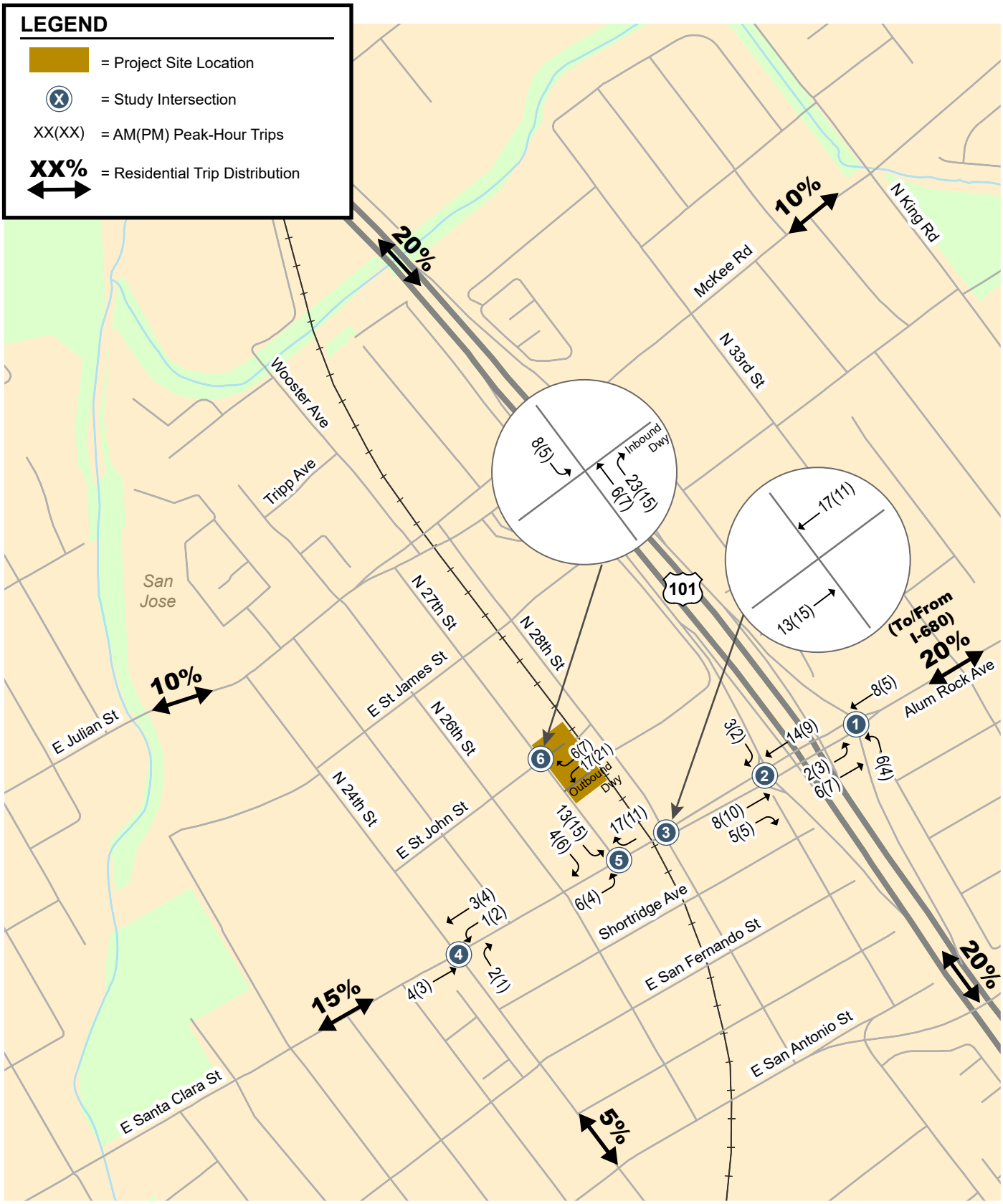

Figure 7
Residential Project Trip Distribution Pattern and Gross Trip Assignment

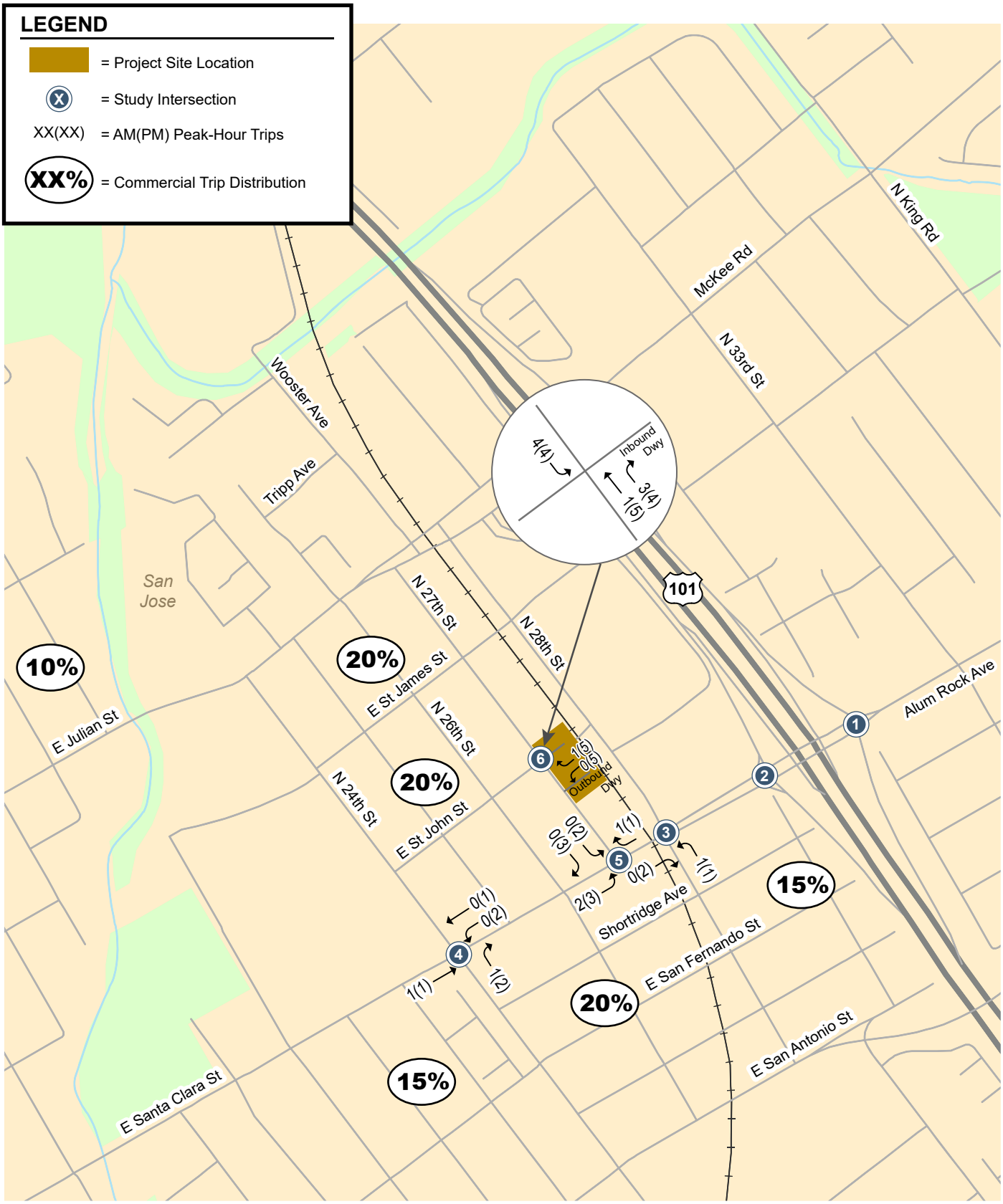

Figure 8
Existing Trip Credits

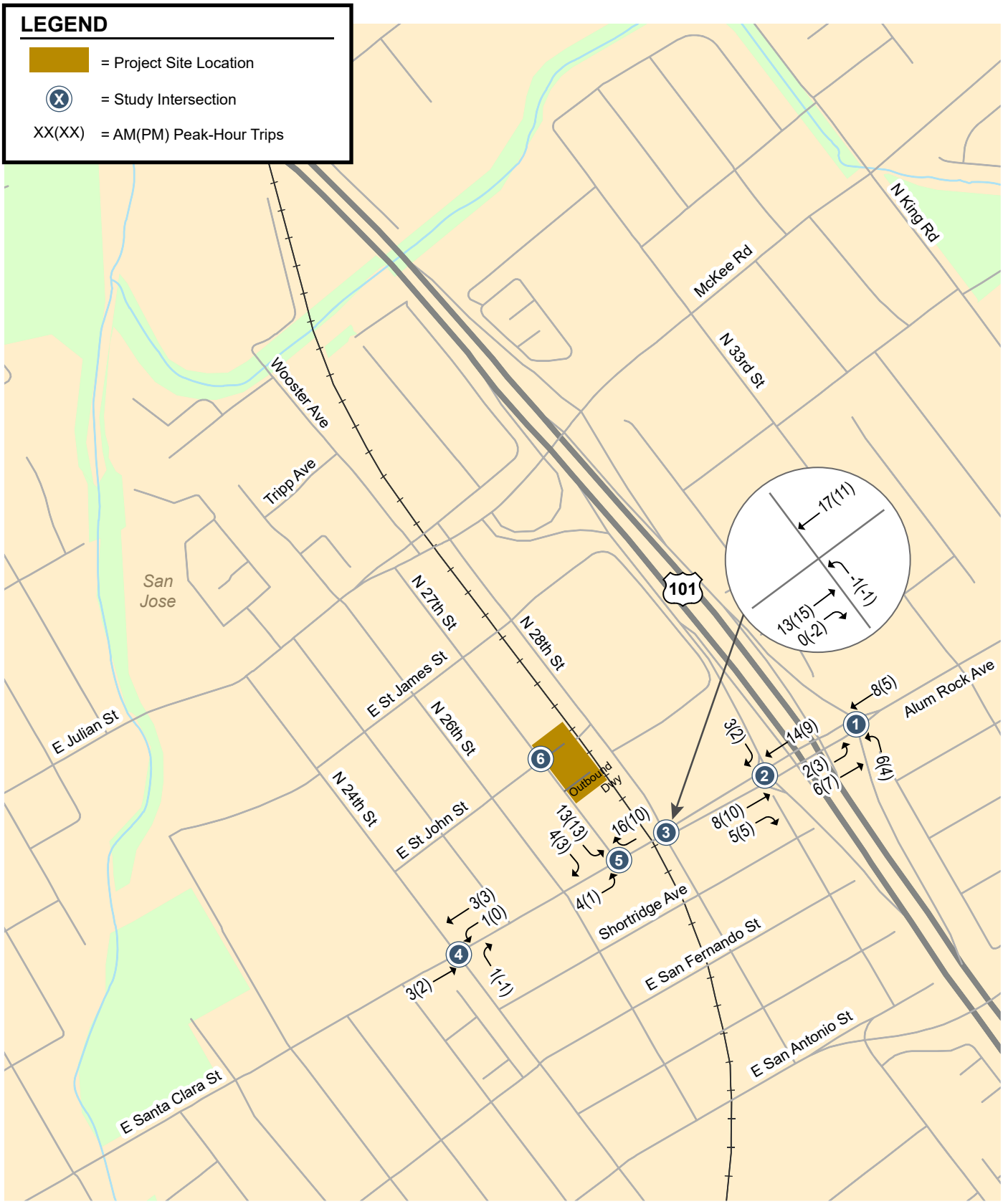

Figure 9
Net Project Trip Assignment

Traffic Volumes Under All Scenarios

Existing Traffic Volumes

Existing AM and PM peak hour traffic volumes for the signalized study intersections were obtained from 2018 and 2019 counts. The 2018 and 2019 counts were provided by the City of San Jose and also obtained from the 2018 CMP Annual Monitoring Report. Note that although new 2022 traffic counts were collected at all the study intersections, the current traffic volumes in the study area have not yet returned to levels prior to the COVID-19 pandemic, so the new counts were not used for the signalized intersections. The new 2022 counts were used for the unsignalized intersections, however, since historical count data is not available for unsignalized intersections. The existing peak hour intersection volumes are shown graphically on Figure 10.

Background Traffic Volumes

Background traffic volumes were estimated by adding to existing peak hour volumes the projected volumes from approved but not yet completed or occupied developments. The added traffic from approved but not yet completed or occupied developments was provided by the City of San Jose in the form of the Approved Trips Inventory (ATI). The ATI sheets are contained in Appendix A. 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 background peak-hour intersection volumes are shown on Figure 11.

Background Plus Project Traffic Volumes

Project peak hour trips were added to background peak hour traffic volumes to obtain project peak hour traffic volumes (see Figure 12).

Cumulative Traffic Volumes

Cumulative traffic volumes were estimated by adding to existing volumes the ATI provided by City staff, project-generated trips, and trips generated by pending developments in the study area. For the purpose of this study, cumulative traffic volumes include traffic generated by the following nearby pending projects: 1298 Tripp Avenue residential mixed-use project (235 affordable DU + 2,815 s.f. of retail), 1347 E. Julian Street residential mixed-use project (45 affordable DU + 2,454 s.f. of retail), and 1325 E. Julian Street residential mixed-use project (633 DU + 11,021 s.f. of retail. This traffic scenario is provided for informational purposes at the request of the City of San Jose. The cumulative peak-hour intersection volumes are shown on Figure 13. Traffic volumes for all traffic scenarios are tabulated in Appendix B.

Signalized 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 all the signalized study intersections are currently operating at acceptable levels of service (LOS D or better) during the AM and PM peak hours of traffic and would continue to operate acceptably under background, background plus project, and cumulative conditions (see Table 3). The detailed intersection level of service calculation sheets are included in Appendix C.

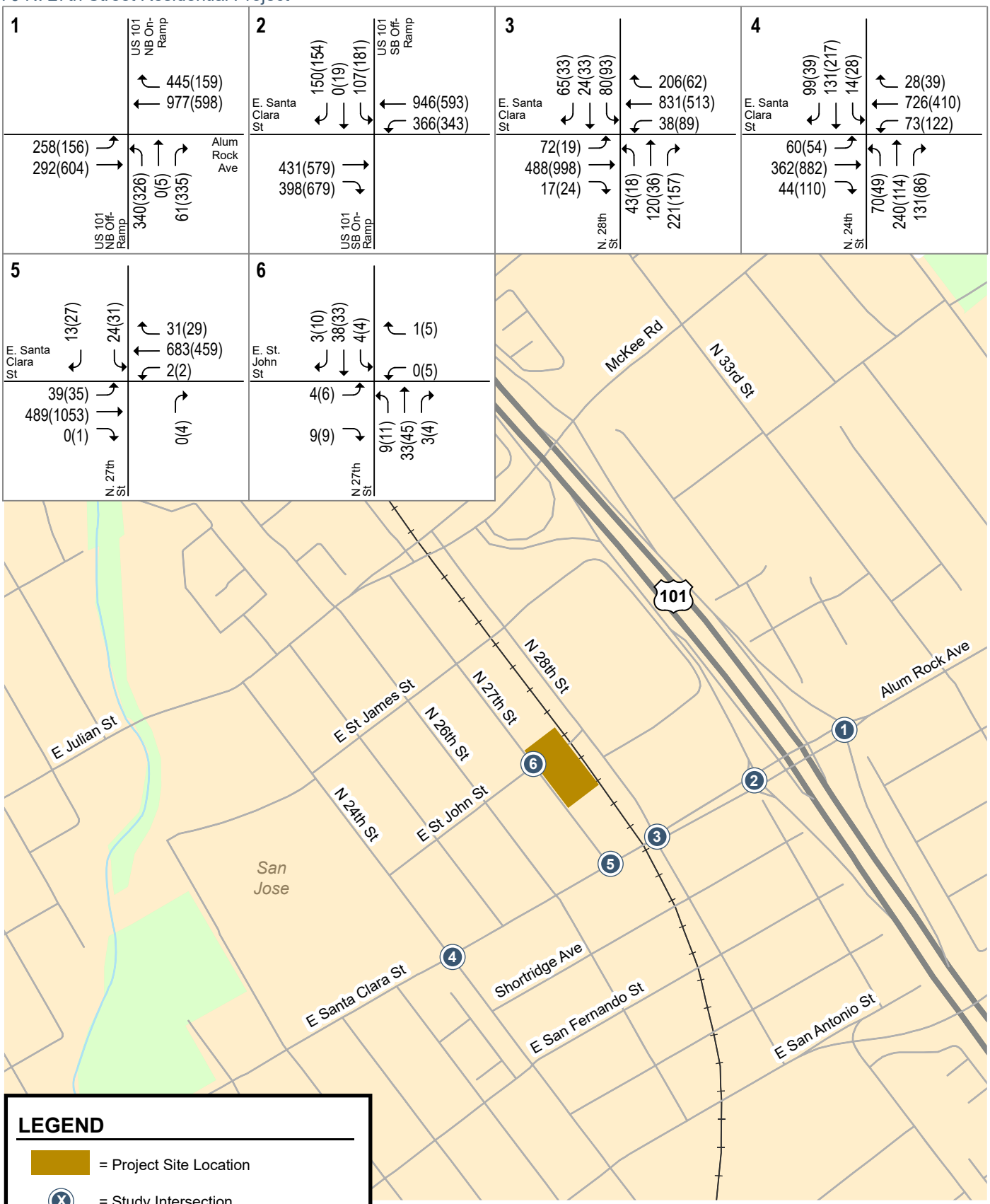

Figure 10
Existing Traffic Volumes

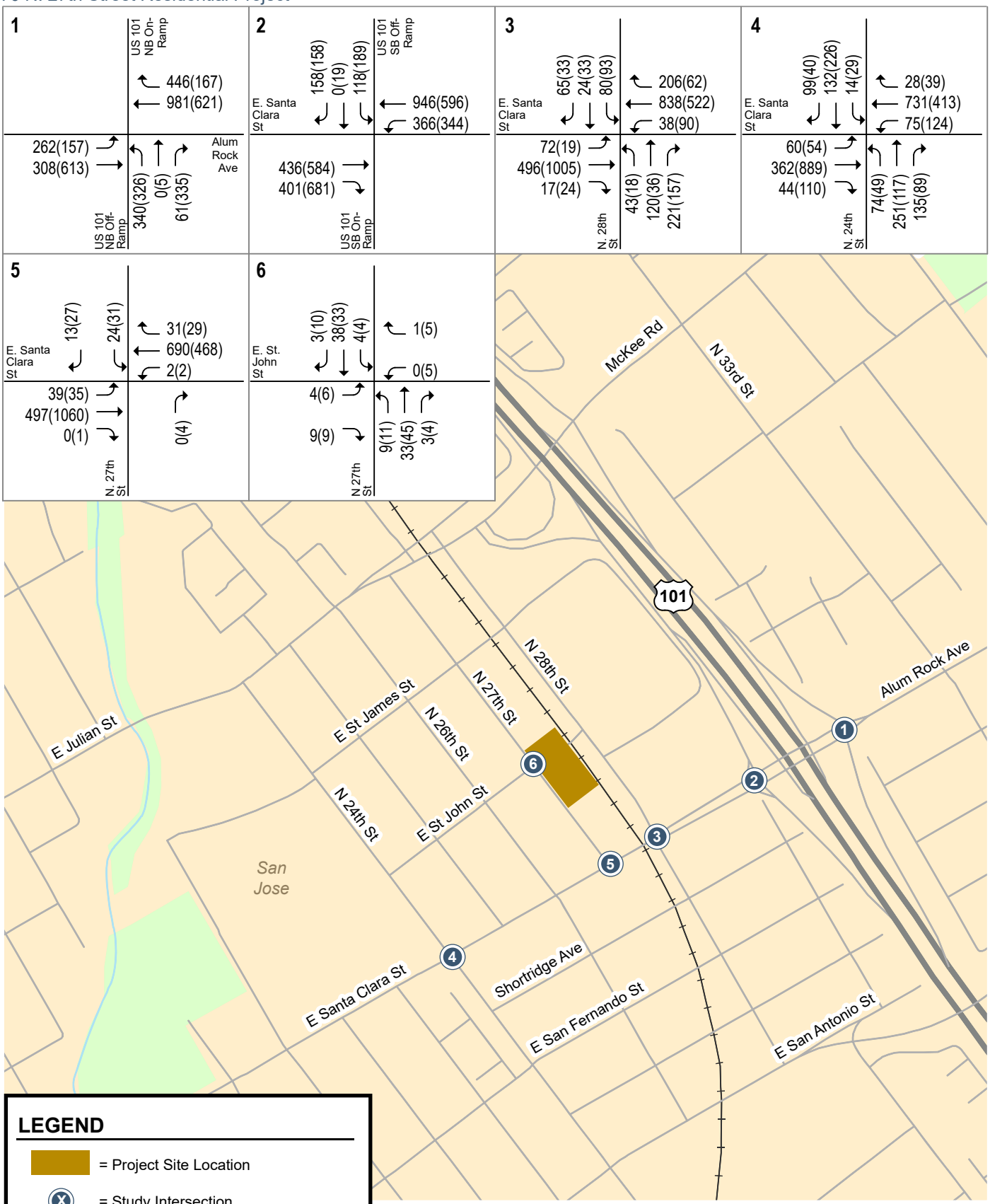

Figure 11
Background Traffic Volumes

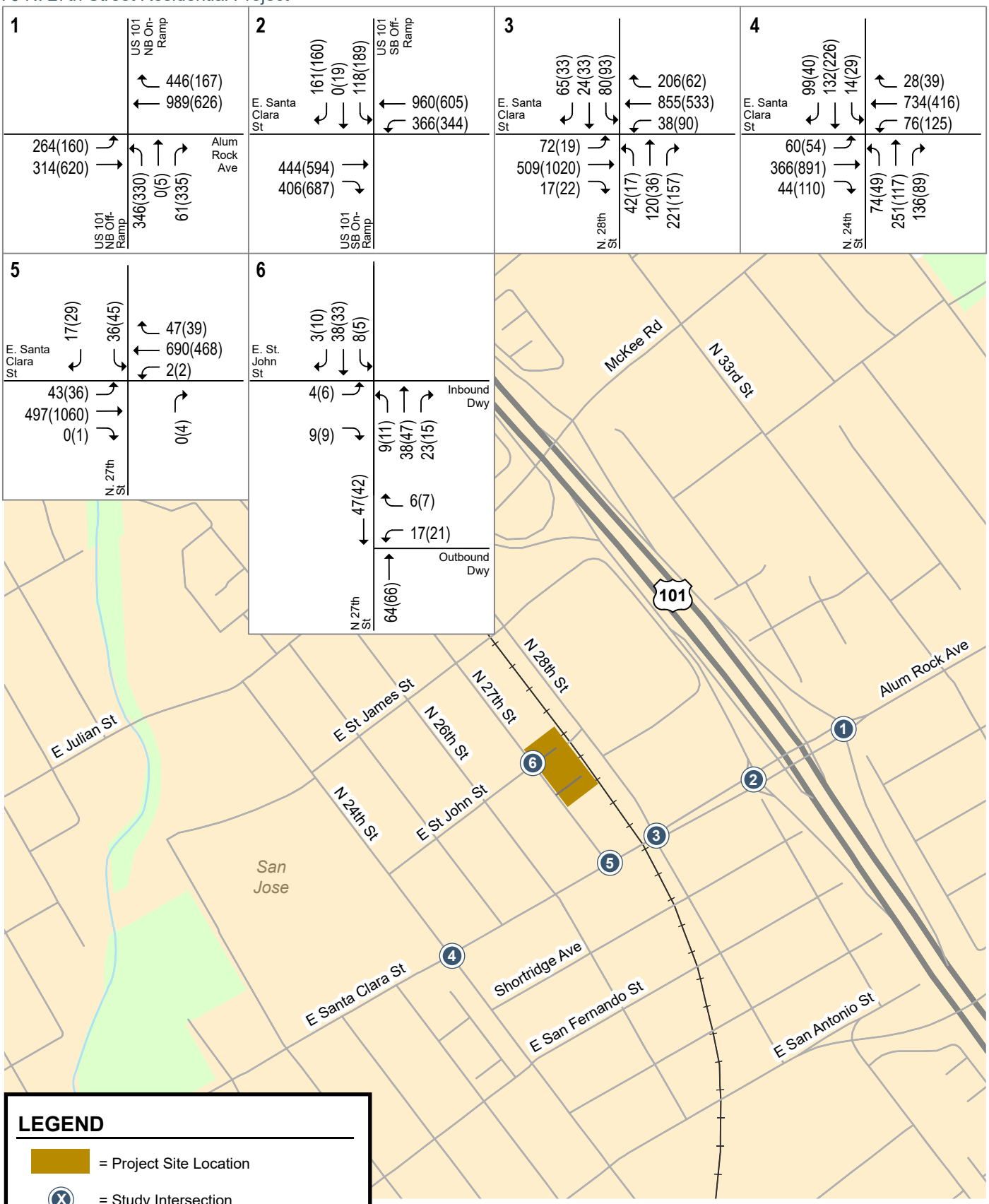

Figure 12
Background Plus Project Traffic Volumes

NORTH
Not to Scale

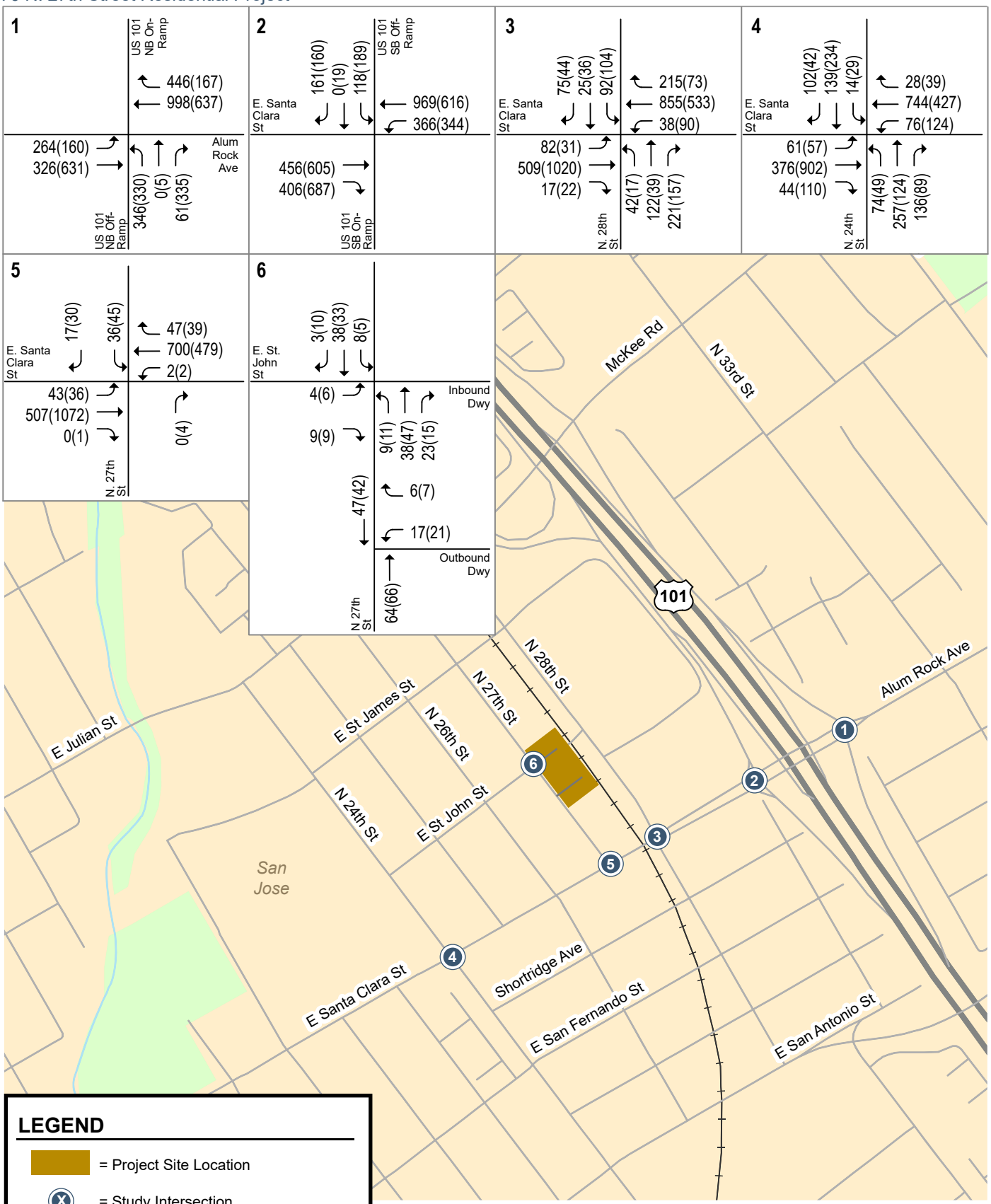

Figure 13
Cumulative Traffic Volumes

Table 3
Intersection Level of Service Summary

#	Signalized Intersection	Peak Hour	Count Date	Existing Avg. Delay (sec)	Existing LOS	Background Avg. Delay (sec)	Background LOS	Background + Project Avg. Delay (sec)	Background + Project LOS	Background + Project Incr. In Crit. Delay (sec)	Background + Project Incr. In Crit. V/C	Cumulative Avg. Delay (sec)	Cumulative LOS
1	US 101 NB Ramps & Alum Rock Av *	AM	9/19/2019	12.4	B	12.4	B	12.4	B	0.1	0.005	12.4	B
		PM	12/13/2018	13.6	B	13.6	B	13.6	B	0.0	0.003	13.6	B
2	US 101 SB Ramps & Santa Clara St *	AM	9/19/2019	11.6	B	11.8	B	11.9	B	0.1	0.003	11.9	B
		PM	12/13/2018	14.2	B	14.4	B	14.4	B	0.1	0.004	14.3	B
3	28th St & Santa Clara St	AM	9/19/2019	21.1	C	21.1	C	21.0	C	0.0	0.004	21.2	C
		PM	9/19/2019	17.3	B	17.3	B	17.2	B	-0.1	0.003	17.3	B
4	24th St & Santa Clara St	AM	9/20/2018	22.3	C	22.5	C	22.5	C	0.0	0.002	22.6	C
		PM	9/20/2018	21.1	C	21.4	C	21.4	C	0.0	0.001	21.5	C

Notes:
* Denotes CMP intersection

Unsignalized Intersection Traffic Operations

Signal Warrant – N. 27th Street and Santa Clara Street

Traffic conditions at the unsignalized study intersection of N. 27th Street and Santa Clara Street were assessed to determine whether a traffic signal would be warranted based on the peak-hour volume signal warrant (Warrant #3) described in the *California Manual on Uniform Traffic Control Devices* (CA MUTCD). The results of the signal warrant check indicate that the AM and PM peak-hour volumes at the unsignalized study intersection currently do not meet the signal warrant and would not meet the warrant with the addition of project-generated trips. The signal warrant sheets are included in Appendix D.

Multiway Stop Warrant – N. 27th Street and E. St. John Street

The northern project driveway would serve as the east leg of the unsignalized study intersection of N. 27th Street and E. St. John Street. The east and west legs of the intersection (project driveway and E. St. John Street, respectively) are stop-controlled. As proposed, N. 27th Street would remain uncontrolled in both directions. Since the traffic volumes on the east and west legs of the intersection would continue to be very low under project conditions, two-way stop control is the most efficient configuration, and the intersection would continue to operate adequately. Multiway stop control at this intersection is not recommended due to the low traffic volumes on the east and west legs. Multiway stop control is most often used where the volume of traffic on all legs is approximately equal. Note also that due to the proposed one-way driveway configuration, the east leg of the intersection (inbound project driveway) would have no approach volume (outbound/westbound volume). Furthermore, the enhanced pedestrian crosswalk on the north leg and bulbouts at the northwest and southeast corners of the intersection that are planned as part of the East San Jose MTIP would enhance pedestrian visibility, shorten the crossing distances, and slow vehicle traffic along N. 27th Street. Thus, for these reasons multiway stop control would not be necessary at this intersection.

Intersection Queuing Analysis

The intersection queuing analysis (see Table 4) is based on vehicle queuing for left-turn movements at intersections near the project site where the project would add a noteworthy number of trips. Based on

the project trip generation and trip distribution pattern, the southbound and eastbound left-turn movements at the unsignalized intersection of 27th Street and Santa Clara Street were evaluated as part of the queuing analysis for this project. The project would not add a noteworthy number of trips to any other study intersection.

Table 4
Intersection Queuing Analysis Summary

	27th Street and Santa Clara Street			
	Southbound L-T-R		Eeastbound LT	
Measurement	AM	PM	AM	PM
Existing				
Cycle/Delay [1] (sec)	19.0	22.2	9.2	8.4
Volume (vphpl)	37	58	39	35
95th %. Queue (veh/ln.)	1	2	1	1
95th %. Queue (ft./ln) [2]	25	50	25	25
Storage (ft./ ln.) [3]	550	550	100	100
Adequate (Y/N)	Y	Y	Y	Y
Background				
Cycle/Delay [1] (sec)	19.3	22.6	9.2	8.5
Volume (vphpl)	37	58	39	35
95th %. Queue (veh/ln.)	1	2	1	1
95th %. Queue (ft./ln)	25	50	25	25
Storage (ft./ ln.) [3]	550	550	100	100
Adequate (Y/N)	Y	Y	Y	Y
Background Plus Project				
Cycle/Delay [1] (sec)	21.2	26.8	9.3	8.5
Volume (vphpl)	53	74	43	36
95th %. Queue (veh/ln.)	1	2	1	1
95th %. Queue (ft./ln) [2]	25	50	25	25
Storage (ft./ ln.) [3]	550	550	100	100
Adequate (Y/N)	Y	Y	Y	Y

Notes:

[1] Vehicle queue calculations based on cycle length for signalized intersections and average approach delay for unsignalized intersections.

[2] Assumes 25 Feet Per Vehicle Queued.

[3] The Southbound approach at this intersection is a shared lane approach (L-T-R). Thus, the vehicle queues reported reflect the total SB L-T-R volume. 27th St provides 550 ft of storage between Santa Clara St and St. John St.

27th Street at Santa Clara Street

The queuing analysis indicates that the shared southbound approach and the eastbound left-turn pocket at the intersection of 27th Street/Santa Clara Street provide adequate storage capacity to accommodate the maximum vehicle queues that currently occur and would continue to occur under background and background plus project conditions during the AM and PM peak hours of traffic.

Site Access and On-Site Circulation

The site access evaluation is based on the October 31, 2022 site plan prepared by LPMD Architects (see Figure 2). Site access was evaluated to determine the adequacy of the site's driveways with regard to the following: traffic volume, geometric design, sight distance and operations (e.g., queuing and delay). On-site vehicular circulation and parking layout were reviewed in accordance with generally accepted traffic engineering standards and transportation planning principles.

Vehicular Site Access

As proposed, the project would remove two existing commercial driveways on 27th Street and construct two new driveways: one 16-foot-wide inbound only driveway and one 16-foot-wide outbound only driveway. The driveways would provide access to and from the parking garage containing 210 on-site residential parking spaces. The proposed driveway widths would meet the City's standard width for one-way driveway operations.

Driveway Operations

As proposed, the northern project driveway would serve inbound trips only, and the southern driveway would serve outbound trips only. The northern (inbound) driveway would serve as the east leg of the N. 27th Street/E. St. John Street unsignalized intersection. As proposed, the driveway would be offset. However, since the northern project driveway would serve inbound trips only, the offset would not create any significant operational issues.

The east and west legs of the unsignalized intersection (project driveway and E. St. John Street, respectively) would be stop-controlled. As proposed, N. 27th Street would remain uncontrolled. Since the traffic volumes on the east and west legs of the intersection would continue to be very low under project conditions, two-way stop control is the most efficient configuration, and the intersection would continue to operate adequately. Multiway stop control at this intersection is not recommended due to the low traffic volumes on the east and west legs. Multiway stop control is most often used where the volume of traffic on all legs is approximately equal. Note also that due to the proposed one-way driveway configuration, the east leg of the intersection (inbound project driveway) would have no approach volume (westbound/outbound volume).

The project-generated trips that are estimated to occur at the project driveways are 31 inbound trips and 23 outbound trips during the AM peak hour, and 20 inbound trips and 28 outbound trips during the PM peak hour. This equates to one vehicle trip every two to three minutes at each driveway during both the AM and PM peak periods of traffic. Due to the low number of AM and PM peak hour project-generated trips and the low traffic volumes on 27th Street adjacent to the site, operational issues related to vehicle queueing and/or delays are not expected to occur at the project driveways.

The City typically requires developments to provide adequate on-site stacking space for at least two inbound vehicles (40 to 50 feet) between the face of curb and any entry gates or on-site drive aisles or parking spaces. This prevents vehicles from queuing onto the street and blocking traffic. Approximately 45 feet of vehicle stacking space would be provided between the on-site drive aisle/first parking space and the face of curb at the northern inbound only driveway. Accordingly, the project would meet the City's standard for inbound vehicle stacking space.

It is not clear if the project plans to provide security gates at the project entrance and exit. If security gates are to be provided, the gate at the inbound driveway should remain open during the periods of the day when most inbound vehicle trips are likely to occur to avoid potential queuing issues.

Recommendation: If security gates are to be provided, keep the entry security gate open during the periods of the day when most inbound vehicle trips are likely to occur to avoid any inbound queuing issues.

Sight Distance

There are no existing landscaping, roadway curves, or other visual obstructions along the project frontage that could obscure sight distance at the project driveway, and the site plan does not indicate any new landscaping that could affect the sight distance at the driveway. Although street trees are present, the existing trees have high canopies and do not hinder sight distance.

Street parking is currently allowed along the project frontage on 27th Street and would continue to be permitted. Therefore, no parking zones (red curb) should be established immediately adjacent to the outbound project driveway.

Recommendation: Establish no parking zones (at least 15 feet of red curb) immediately adjacent to the outbound project driveway to ensure adequate sight distance.

Providing the appropriate sight distance reduces the likelihood of a collision at a driveway or intersection and provides drivers with the ability to locate sufficient gaps in traffic. Sight distance generally should be provided in accordance with Caltrans standards. The minimum acceptable sight distance is often considered the Caltrans stopping sight distance. Sight distance requirements vary depending on the roadway speeds. For 27th Street, which has a speed limit of 25 mph, the Caltrans stopping sight distance is 200 feet (based on a design speed of 30 mph). This means that a driver must be able to see 200 feet down 27th Street to locate a sufficient gap to turn out of the project driveway. This also gives drivers traveling along 27th Street adequate time to react to vehicles exiting the project driveway. Assuming the recommended red curb, the project driveways would meet the Caltrans stopping sight distance requirement.

On-Site Vehicular Circulation and Parking Layout

On-site vehicular circulation was reviewed in accordance with generally accepted traffic engineering standards and City of San Jose design guidelines. Access to the parking garage would be provided via two driveways on 27th Street. The drive aisles were evaluated for vehicle access by the method of turning-movement templates. Analysis using the appropriate Passenger Car turning templates shows that standard passenger vehicles (turning template “Pm”) and larger passenger vehicles (Passenger Car turning template “P”) could adequately access the on-site parking spaces and circulate through the parking garage efficiently (no dead-end drive aisles).

The City’s standard minimum width for two-way drive aisles is 26 feet wide where 90-degree parking is provided. This allows sufficient room for vehicles to back out of the parking spaces. Due to the structural supports shown on the site plan, the northern, eastern and western two-way drive aisles measure 24 feet wide. The southern east-west oriented drive aisle measures 22 feet wide. Although the proposed drive aisle widths do not meet the City’s minimum standard, the 24-foot-wide drive aisles would provide adequate room for drivers to access the parking spaces and circulate through the garage. City of San Jose Public Works staff have confirmed that the proposed 24-foot internal drive aisle widths would be adequate to serve the residential project. However, City staff are requesting that the 22-foot-wide southern drive aisle be widened to 24 feet.

Recommendation: Increase the southern east-west oriented drive aisle width from 22 feet to 24 feet.

Parking Stall Dimensions

The project proposes to utilize a three-level mechanical puzzle parking lift system (pit + at-grade + overhead levels), which allows the stacked parking spaces to be shifted vertically and horizontally.

There would be four separate systems so four cars could wait simultaneously. This would ensure that no back-ups would occur within the garage due to vehicles waiting for a space. The City of San Jose Zoning Code does not include standards for mechanical-stack parking systems. According to the site plan, the stacked parking spaces would measure 8.5 feet wide by 18 feet long. Although not indicated on the site plan provided, it is assumed that the height limit of the vehicle stacker system would accommodate passenger cars, trucks, and most SUVs and vans. Four ADA accessible parking stalls measuring 9 feet wide by 18 feet long would be provided on-site, including two van accessible stalls. The site plan only labels one van accessible stall.

Recommendation: Verify the height limit of the vehicle stacker system would accommodate all possible resident vehicle types: passenger cars, trucks, SUVs and vans.

Truck Access and Circulation

The project site plan was reviewed for truck access including delivery and moving trucks, garbage trucks and emergency vehicles.

Residential Move-In and General Loading Operations

The current site plan does not show any freight loading areas for residential move-in/move-out or commercial/delivery vehicles. Based on the centrally-located lobby and elevator, it is assumed that loading activities would occur along 27th Street halfway between the project driveways. If on-site or on-street loading spaces are not provided, moving trucks and delivery vehicles could be forced to double park. This would block some street parking and the northbound direction of travel on 27th Street. The project should coordinate with City staff to determine the appropriate location and size for an on-street freight loading area. Note, however, that the City of San Jose typically prefers that loading activities occur on-site and not within the public right-of-way. The site plan shows a 15-foot first floor height. Thus, it appears that adequate vertical clearance would be provided for most delivery and moving vehicles.

Recommendation: Coordinate with City staff during the implementation phase to determine the appropriate location and size for an on-site or on-street freight loading area to serve the proposed residential project.

Garbage Collection

Similar to other properties within the neighborhood, garbage collection activities for the project would occur within the public right-of-way on 27th Street. The site plan shows a trash room with an adjacent trash staging area at the southwest corner of the site. Trash bins would be wheeled out to 27th Street on garbage collection days and returned to the trash room after garbage pick-up.

Emergency Vehicle Access

The City of San Jose Fire Department requires that all portions of the buildings be within 150 feet of a fire department access road, requires a minimum of 6 feet clearance from the property line along all sides of the building, and requires a minimum of 13 feet 6 inches of vertical clearance to enter a parking structure. According to the site plan, the project appears to meet all three fire access requirements, including the vertical clearance requirement (the site plan shows a 15-foot first floor height).

Site Plan Layout

The project should work closely with City staff to guarantee the proposed site plan is consistent with the future alignment of the Five Wounds Creek Class I trail and future development (i.e., transit-oriented development) associated with the BART Silicon Valley (BSV) 28th Street Station project. The project

should also coordinate with the VTA to ensure proper building shoring and foundation locations due to the project site being within the zone of influence of the BSV tunnel.

Recommendation: Coordinate with the City of San Jose to ensure the site plan is consistent with the future alignment of the Five Wounds Creek Class I trail and future development associated with the BSV-BART 28th Street Station project.

Recommendation: Coordinate with the VTA to ensure proper building shoring and foundation locations due to the project site being within the zone of influence of the BSV tunnel.

Construction Activities

Typical activities related to the construction of any development could include lane narrowing and/or lane closures, sidewalk and pedestrian crosswalk closures, and bike lane closures. In the event of any type of closure, clear signage (e.g., sidewalk 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 and parking, and the planned truck routes.

Pedestrian, Bicycle and Transit Evaluation

All new development projects in San Jose should encourage multi-modal travel, consistent with the goals and policies 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 and Bicycle Facilities

Pedestrian Facilities

A complete network of sidewalks and crosswalks is found within the project study area. Crosswalks with pedestrian signal heads are located at all the signalized intersections in the study area. The existing pedestrian facilities provide adequate connectivity between the project site and nearby bus stops and other points of interest.

The site plan indicates that portions of the existing attached 12-foot-wide sidewalk and curb along the project frontage on 27th Street would be reconstructed (existing driveways removed and new driveways added). The site plan shows a 3-foot-wide paved area with modular bioretention features would be added between the building and the existing sidewalk, creating a 15-foot-wide attached sidewalk with tree wells. The sidewalk would provide direct access to the residential lobby, mail room, and leasing office that would front 27th Street. The site plan shows a paved pedestrian path would encircle the building and provide access to a secondary elevator and staircase and the future Five Wounds Creek Class I trail that will ultimately run along the eastern boundary of the site (area between the site and 28th Street). The pedestrian path would vary in width. The plan shows a 6-foot-wide path on the south, a 10-foot-wide path on the east, and an 8-foot-wide path on the north side of the building.

Recommendation: Widen the proposed 6-foot-wide path on the south side of the building and 8-foot-wide path on the north side of the building to be at least 10 feet wide per the City

of San Jose's Class I trail design standards. The future pedestrian connection should have a public access easement.

Bicycle Facilities

Existing bicycle facilities in the study area are very limited. There are no Class II striped bike lanes in the immediate vicinity of the project site. 24th Street is a designated bike route with shared lane markings (Sharrows). No other bicycle facilities exist within ¼-mile of the project site.

The project would not remove any bicycle facilities, nor would it conflict with any adopted plans or policies for new bicycle facilities. However, as mentioned above, the future Five Wounds Creek trail will be situated adjacent to the eastern boundary of the project site and N. 28th Street. The trail would provide bicyclists with a paved path that is separated from automobiles. The project should work closely with the City of San Jose to ensure the proposed residential development and the future trail would have no conflicting design elements.

Recommendation: Coordinate with City of San Jose staff to ensure the proposed residential project and the future Five Wounds Creek trail would have no conflicting design elements.

Short-term bike parking is shown on the site plan near the lobby on 27th Street and at the back of the site near the future Five Wounds Creek trail entrance.

Planned Pedestrian and Bicycle Connections to BART

According to the East San Jose Multimodal Transportation Improvement Plan (MTIP), future pedestrian and bicycle improvements are planned to enhance pedestrian and bicycle connections to the 28th Street/Little Portugal BART station. East St. John Street, which serves the 70 N. 27th Street project site directly, has been identified as one of the three "Connection to BART" projects in the area. Planned improvements along the segment of E. St. John Street between Roosevelt Park and the BART station include enhanced pedestrian and bicycle crossings and wayfinding elements. Planned improvements at the N. 27th Street/E. St. John Street intersection include an enhanced pedestrian crosswalk on the north leg of the intersection, bulbouts at the northwest and southwest corners of the intersection, and an additional bulbout on the east side of N. 27th Street at the northwest corner of the project site. The bulbouts would include ADA-compliant directional curb ramps. These pedestrian improvements are shown on the site plan (see Figure 2).

Recommendation: Implement the planned multimodal improvements at the N. 27th Street/E. St. John Street intersection that are identified as a Connection to BART project in the East San Jose MTIP.

Pedestrian and Bicycle Access to Schools

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

High Schools

- Cristo Rey San Jose Jesuit High School, located ¼-mile walk to the east on Santa Clara Street
- San Jose High School, located ¼-mile walk to the west on N. 24th Street

Middle Schools

- ACE Inspire Academy Middle School, located ½-mile walk to the northwest on Julian Street
- Sunrise Middle School, located ½-mile walk to the northwest on Julian Street

Elementary Schools

- Rocketship Discovery Prep Middle School, located ½-mile walk to the north on Wooster Avenue
- Anne Darling Elementary School, located ¾-mile walk to the north on N. 33rd Street

- Empire Gardens Elementary School, located 1-mile walk to the northwest on Empire Street
- Olinder Elementary School, located 1-mile walk to the south on William Street
- KcKinley Elementary School, located 1-mile walk to the south on Macredes Avenue
- San Antonio/LUCHA Elementary School, located 1-mile walk to the east on San Antonio Street

Safe pedestrian access to all 10 schools is provided via a continuous network of sidewalks in the study area. Crosswalks with pedestrian signal heads are provided at all the signalized intersections, and some signalized and unsignalized intersections near the schools have high visibility crosswalks. Curb ramps are provided at all intersections along the routes between the project site and the schools, though not all meet current ADA design standards.

Bicycle facilities in the area are limited to 21st Street, 24th Street, 33rd Street, and San Antonio Street. The lack of bicycle facilities in the area would make bicycling to and from most of the nearby middle schools and elementary schools undesirable.

The project should work closely with these nearby schools to implement a Safe Routes to Schools program, or participate in a program if one already exists, since 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

Existing bus service in the project vicinity is provided by the Santa Clara Valley Transportation Authority (VTA). The project area is served by frequent bus routes 22, 23, 64A, 64B, and Rapid 522. Bus routes 22 and 23 stop within walking distance of the project site on Santa Clara Street. The three existing bus stops within walking distance of the project site included shelters with benches and are easily accessible via the network of sidewalks and crosswalks along Santa Clara Street.

Since the project site is served by two bus routes, it is reasonable to assume that some residents would utilize the bus service. It is estimated that the small increase in transit demand generated by the project could be accommodated by the current available ridership capacity of the VTA bus service.

Parking

The project's off-street parking requirements for automobiles, motorcycles and bicycles are based on the City of San Jose parking standards (*San Jose Municipal Code Chapter 20.90, Tables 20-210 and 20-250*).

Residential Vehicle Parking

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, 1.7 parking spaces for two-bedroom units, and 2.0 parking spaces for three-bedroom units. Based on the City's off-street parking requirements and prior to applying any relevant parking reductions, the 200-unit project, which would consist of 26 studios and 174 one-bedroom units, would require a total of 250 parking spaces (200 DU x 1.25 = 250 spaces).

Residential Parking Reduction for Proximity to a Major Transit Station

Since the project site is located within 2,000 feet of a future 28th Street/Little Portugal BART station, the project qualifies for a 20 percent reduction in the City's parking requirement. After applying a 20 percent parking reduction, the project would be required to provide a total of 200 residential parking spaces (250 x 0.8 = 200 spaces).

Proposed Residential Parking Supply

The project is proposing to provide 210 residential parking stalls as part of a three-level puzzle parking system within the parking garage (pit + at-grade + overhead levels). The automated parking system would allow the stacked parking spaces to be shifted vertically and horizontally, allowing residents to retrieve their vehicle without the need to move the other accompanying vehicles. Comprised of multiple parking spaces including one open space, the vehicle stackers would present an open parking space that, once occupied, would automatically shift downward or rotate, presenting another open space. There would be four separate systems so four cars could wait simultaneously, ensuring that no back-ups would occur within the garage due to vehicles waiting for a space.

The City of San Jose Zoning Code does not specify standard dimensions for mechanical-stack parking systems. However, the project site plan shows the mechanical parking stalls would measure approximately 8.5 feet wide by 18 feet long (equivalent to a full-size car space), which would accommodate passenger cars and most trucks, SUVs and vans. As proposed, the 210-space puzzle parking system would meet the City's residential parking requirement. The project would provide 4 standard ADA accessible spaces (non-puzzle parking spaces), including one van-accessible space.

Electric Vehicle Parking Requirements

Per the San Jose Municipal Code (Section 24.10.200), new multifamily dwellings must provide 100 percent electric vehicle (EV) Capable parking spaces, including at least 10 percent EVSE Spaces (EVSE = Electric Vehicle Supply Equipment) and 20 percent EV Ready Spaces. The proposed puzzle parking system must be designed to meet these EV parking standards.

Recommendation: Provide on-site EV parking spaces and EV Ready spaces to the satisfaction of the City of San Jose Planning Department.

Motorcycle Parking

The City requires one motorcycle parking space for every four residential units (per Chapter 20.90, Table 20-250 of the City's Zoning Code). This equates to 50 residential motorcycle spaces. Applying a 20 percent reduction to the residential project (Urban Village reduction) equates to a total parking requirement of 40 motorcycle spaces. Based on the site plan, the project is not proposing to provide any motorcycle parking.

Recommendation: Provide on-site motorcycle parking to the satisfaction of the City of San Jose Planning Department.

Bicycle Parking

The City requires one bicycle parking space for every four residential units (per Chapter 20.90, Table 20-210 of the City's Zoning Code). Thus, the project is required to provide a total of 50 bicycle parking spaces to serve the residents.

According to the site plan, the project is proposing to provide a total of 55 bicycle parking spaces, which would exceed the City's bicycle parking requirements. The site plan shows 50 long-term bicycle parking spaces would be provided within the residential building on floors 2 through 6 (10 spaces on each floor) and 5 short-term spaces would be provided within a small bike room at the northwest corner of the building near the inbound driveway on N. 27th Street.

5. Conclusions

This report presents the results of the transportation analysis conducted for a proposed residential project at 70 N. 27th Street in San Jose, California. The project would demolish a partially occupied 21,454 square-feet (s.f.) two-story commercial building and construct a new building consisting of five floors of residential units (up to 200 units, including approximately 5% affordable units) over podium parking. The ground floor would provide 210 residential parking spaces in a three-level automated puzzle parking system. The project would provide direct access to the future Five Wounds Creek Trail. Vehicular access to the project site would be provided via two driveways on N. 27th Street (similar to the existing site layout).

This study was conducted for the purpose of identifying the potential transportation impacts and operational issues related to the proposed development. The transportation impacts of the project were evaluated following the standards and methodologies established in the City of San Jose's *Transportation Analysis Handbook,* adopted in April 2020. Based on the City of San Jose's Transportation Analysis Policy (Council Policy 5-1) and the *Transportation Analysis Handbook,* the study includes a non-CEQA local transportation analysis (LTA).

The LTA analyzes AM and PM peak hour traffic conditions for four signalized intersections and two unsignalized intersections in the vicinity of the project site. The LTA also includes an analysis of site access, on-site circulation, parking, vehicle queuing, and effects to transit services and bicycle and pedestrian access.

Vehicle Miles Traveled (VMT) Analysis

The City of San Jose's *Transportation Analysis Handbook, 2020* includes screening criteria for projects that are expected to result in a less-than-significant VMT impact based on the project description, characteristics and/or location. Projects that meet the screening criteria do not require a CEQA transportation analysis but are typically required to provide a Local Transportation Analysis (LTA) to identify potential operational issues that may arise due to the project. The project would meet the residential screening criteria set forth in the City's *Transportation Analysis Handbook.* Therefore, the residential project is exempt from preparing a detailed VMT analysis.

Cumulative Analysis

Developments within the Five Wounds Urban Village may include residential mixed-use projects with residential above retail. Residential projects that do not include a commercial component are not consistent with the *Urban Village* designation within the Five Wounds Urban Village.

The proposed project at 70 N. 27th Street consists of a high-density transit-oriented residential development, including an affordable housing component (approximately 5% affordable). The project site is situated adjacent to the future Five Wounds Creek multi-use trail and is within walking distance of

the future 28th Street/Little Portugal BART station. Additionally, the project is proposing a residential development density of 172 DU/AC (200 DU/1.16 AC = 172 DU/AC), which would meet the minimum development density of 35 DU/AC as defined in the City's screening criteria for VMT analysis and would be less than the maximum allowable density of 250 DU/AC as defined in the Five Wounds Urban Village Plan. However, the project does not propose to include any ground floor retail space. Therefore, the proposed project would be inconsistent with the mixed-use format requirement within the Five Wounds Urban Village.

Since the project would be inconsistent with the Five Wounds Urban Village Plan, it would not conform to the General Plan and would require a General Plan Amendment (GPA) to proceed. The residential project would not meet the General Plan's long-range transportation goals and would result in a significant cumulative impact. The project should coordinate with the City of San Jose Planning Department to determine what would be required to bring the project into conformance with the General Plan.

Project Trip Generation

After applying the appropriate ITE trip rates, applicable trip adjustments and reductions, and existing trip credits, the proposed project is estimated to generate 636 new daily vehicle trips, with 46 new trips (24 inbound and 22 outbound) occurring during the AM peak hour and 30 new trips (12 inbound and 18 outbound) occurring during the PM peak hour.

Intersection Traffic Operations

Based on the City of San Jose intersection operations analysis criteria, none of the study intersections would be adversely affected by the project.

Other Transportation Issues

The proposed site plan shows generally adequate site access and on-site circulation. The project would not have an adverse effect on the existing pedestrian, bicycle or transit facilities in the study area. Below are recommendations resulting from the site plan review.

Recommendations

- If security gates are to be provided, keep the entry security gate open during the periods of the day when most inbound vehicle trips are likely to occur to avoid any inbound queuing issues.
- Establish no parking zones (at least 15 feet of red curb) immediately adjacent to the outbound project driveway to ensure adequate sight distance.
- Increase the southern east-west oriented drive aisle width from 22 feet to 24 feet.
- Verify the height limit of the vehicle stacker system would accommodate all possible resident vehicle types: passenger cars, trucks, SUVs and vans.
- Coordinate with City staff during the implementation phase to determine the appropriate location and size for an on-site or on-street freight loading area to serve the proposed residential project.
- Coordinate with the City of San Jose to ensure the site plan is consistent with the future alignment of the Five Wounds Creek Class I trail and future development associated with the BSV-BART 28th Street Station project.
- Coordinate with the VTA to ensure proper building shoring and foundation locations due to the project site being within the zone of influence of the BSV tunnel.

- Widen the proposed 6-foot-wide path on the south side of the building and 8-foot-wide path on the north side of the building to be at least 10 feet wide per the City of San Jose's Class I trail design standards. The future pedestrian connection should have a public access easement.
- Coordinate with City of San Jose staff to ensure the proposed residential development and the future Five Wounds Creek trail would have no conflicting design elements.
- Implement the planned multimodal improvements at the N. 27th Street/E. St. John Street intersection that are identified as a Connection to BART project in the East San Jose MTIP.
- Provide on-site EV parking spaces and EV Ready spaces to the satisfaction of the City of San Jose Planning Department.
- Provide on-site motorcycle parking to the satisfaction of the City of San Jose Planning Department.