



# HEXAGON TRANSPORTATION CONSULTANTS, INC.

## Memorandum

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**Date:** February 8, 2020  
**To:** Tiffany Pong, City of San Jose  
**From:** Robert Del Rio, T.E.  
**Subject:** The Mark Development Local Transportation Analysis

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Hexagon Transportation Consultants, Inc. has completed a Local Transportation Analysis (LTA) for the proposed The Mark Residential Tower development located at 459-475 S. Fourth Street in Downtown San Jose. The project site is located on the west side of S. Fourth Street, approximately 100 feet north of E. William Street. The project, as proposed, would demolish the existing apartment buildings and one single-family home on site and construct a 240-unit residential tower. The intent of the project is to provide student housing for San José State University (SJSU). The 240 dwelling units would have a total of approximately 750 beds. By law, there cannot, however, be restrictions on who may occupy the building. As such, the building may be rented by unit or by bed. The analysis in this document assumes standard occupancy for high-rise apartments. Access to the project site is proposed via a single right-in/right-out driveway along the project's southern boundary on Fourth Street.

On-site parking for the proposed project will be provided by a three-level parking garage, one underground and two above ground levels, that will utilize a parking stacker system for all on-site parking. The City will allow the project to supplement its proposed on-site parking with off-site parking to meet its off-street parking requirement. The project applicant proposes to supplement its on-site parking with parking within the existing underground parking garage (Garage 88), which it currently controls, located at 88 San Fernando Street. Figure 1 shows the project site location and off-site parking garage location.

The project site is located within the Downtown Growth Area Boundary, for which an Environmental Impact Report (EIR), *Downtown San Jose Strategy Plan 2040 (DTS 2040)*, has been completed and approved. With adoption of DTS 2040, this project is covered under DTS 2040 and no CEQA transportation analysis is required. The project, however, must perform an LTA to identify operational issues.

## Scope of Study

The purpose of the LTA was to identify any potential operational issues that could occur as a result of the project and to recommend necessary improvements to ensure adequate access to the site is provided and review the project's effect on the surrounding transit, pedestrian, and bicycle facilities. Based on the proposed project size, site-generated traffic was estimated. Vehicular site access was evaluated based on the proposed driveway locations. Truck access, including trash pickup and loading activities, was evaluated. Parking and on-site vehicular circulation also was analyzed. Lastly, an operational analysis on vehicle turn pocket storage was evaluated.



**Figure 1**  
**Site Location**

## Existing Conditions

This section describes the existing conditions for all of the major transportation facilities in the vicinity of the site, including the roadway network, transit service, and bicycle and pedestrian facilities.

### Existing Roadway Network

Regional access to the project site is provided by the Interstate 280/680 freeway and State Route 87. Local site access is provided by Third Street, Fourth Street, Fifth Street, San Salvador Street, William Street, Reed Street, Santa Clara Street, and Virginia Street. The freeways and local roadways are described below.

**Interstate 280** connects from US-101 in San Jose to I-80 in San Francisco. It is generally an eight-lane freeway in the vicinity of downtown San Jose. It also has auxiliary lanes between some interchanges. The section of I-280 just north of the Bascom Avenue overcrossing has six mixed-flow lanes and two high-occupancy-vehicle (HOV) lanes. Connections from I-280 to the project site are provided via partial interchanges at Fourth Street (ramps to the west only), Sixth Street (ramps from the west), and Seventh Street (ramps from the east). I-280/I-680 provides access to SR 87 and US-101.

**State Route 87** is primarily a six-lane freeway (four mixed-flow lanes and two HOV lanes) that is aligned in a north-south orientation within the project vicinity. SR 87 begins at its interchange with SR 85 and extends northward, terminating at its junction with US 101. Connections from SR-87 to the project site are provided via partial interchanges at Auzerais Avenue (ramps to and from the south) and Park Avenue (ramps to and from the north). SR 87 provides access to I-280/I-680 and US-101.

**Third Street** is a two-lane northbound arterial that runs west of the project site and extends from Humboldt Street from the south, to Mission Street in the north. There is on-street parking on both sides of Third Street in the project vicinity. There is a Class IV bikeway that runs along the east side of Third Street between Humboldt Street and St. James Street. From Third Street, the project site can be accessed via San Salvador Street and Fourth Street.

**Fourth Street** is a two-lane southbound arterial that runs along the project frontage and extends from Technology Place at its northern terminus, to Reed Street, where it terminates at the on-ramp to I-280 northbound. On-street parking is permitted on both sides of Fourth Street in the project vicinity. A Class IV bikeway runs along the westside of Fourth Street between St. James Street and Reed Street. Fourth Street will provide direct access to the project site via a single right-turn only driveway.

**Fifth Street** is a north-south two-lane street that extends from Margaret Street from the south, to San Salvador Street in the north. From Fifth Street, the project site can be accessed via San Salvador Street and Fourth Street.

**San Salvador Street** is an east-west two-lane street that extends from Market Street from the west, to 16<sup>th</sup> Street in the east. On-street parking is permitted on only the south side of San Salvador Street between Market Street and Tenth Street. Class II bike lanes are provided along San Salvador Street between Market Street and Fourth Street. Between Fourth Street and Tenth Street, San Salvador Street provides Class IV protected bike lanes in the westbound direction and is a designated Class III bikeway (Bike Route) and provides “sharrow” or shared lane markings in the eastbound direction. From San Salvador Street, the project site can be accessed via Fourth Street.

**William Street** is an east-west two-lane street that extends from Market Street in the west, to 24<sup>th</sup> Street in the east, where it becomes William Court. On-street parking is permitted on both sides of

William Street. William Street is a designated Class III bikeway (Bike Route) and provides “sharrow” or shared lane markings along its entire extent. From William Street, the project site can be accessed via Third Street, San Salvador Street, and Fourth Street.

**Reed Street** is an east-west three-lane street, with two westbound lanes and one eastbound lane. Reed Street extends from Market Street in the west to 14<sup>th</sup> Street in the east. Reed Street provides access to the project site via Third Street, San Salvador Street, and Fourth Street.

### **Existing Bicycle Facilities**

Class IV (protected/buffered bike lanes) are provided along Third Street between St. James Street and Humboldt Street and Fourth Street between St. James Street and Reed Street. Class II bicycle facilities (striped bike lanes) are provided along San Salvador Street, between Market Street and Fourth Street. Additional bicycle facilities are provided along the following roadways within the immediate project area:

Designated Class III bike routes with “sharrow” or shared-lane pavement markings and signage are provided along the following roadways:

- Second Street, between San Carlos Street and Julian Street
- San Carlos Street, between Woz Way and Fourth Street
- William Street, its entire extent
- San Salvador Street, east of Fourth Street in the eastbound direction and east of 10<sup>th</sup> Street in the westbound direction

Class IV bicycle facilities (protected/buffered bike lanes) are currently being installed throughout the Downtown Area as part of the Better Bikeways project. Designated Class IV separated bike lanes are provided along the following roadways:

- San Fernando Street, between Cahill Street and 10<sup>th</sup> Street
- Second Street, south of San Carlos Street
- Second Street, north of Julian Street
- San Salvador Street, between Fourth Street and Tenth Street, westbound direction only

The existing bicycle facilities are shown on Figure 2.

### **Guadalupe River Park Trail**

The Guadalupe River multi-use trail system runs through the City of San Jose along the Guadalupe River and is shared between pedestrians and bicyclists and separated from motor vehicle traffic. The Guadalupe River trail is an 11-mile continuous Class I bikeway from Curtner Avenue in the south to Alviso in the north. This trail system can be accessed via trailheads on either Woz Way or San Carlos Street, approximately 0.6 miles west of the project site.

### **Bike and Scooter Share Services**

Lyft operates the Bay Wheels (formerly Ford Go Bike) bike share program that allows users to rent and return bicycles at various locations. Bike share bikes can be rented and returned at designated docking stations throughout the Downtown area. Additionally, the service offers a dockless, e-bike option that can be located and activated using Lyft’s mobile app and can be parked at any public bike rack. Payment for either of the bike options is provided through the Lyft app or by use of a Clipper card. Two bikeshare stations are located within 1,000 feet of the project site, one approximately 900 feet north of the project site on the west side of Fourth Street, and one approximately 800 feet from the project site, on the southeast corner of Fifth Street and San Salvador Street.



In addition, other micro-mobility companies provide scooter rental services throughout the Downtown area. These services offer electric scooters with GPS self-locking systems that allow for rental and drop-off anywhere. Scooters are located, activated, and paid for through each of these services' mobile apps.

### Existing Pedestrian Facilities

Pedestrian facilities in the study area consist of sidewalks along all the surrounding streets, including the project frontage along Fourth Street. High visibility crosswalks and pedestrian signal heads are present on all legs of all signalized intersections within the project vicinity, including the intersections of Fourth Street/San Salvador Street, Fourth Street/William Street, Third Street/San Salvador Street, and Third Street/William Street.

ADA compliant ramps are located at all crosswalks at the intersections of Fourth Street with both San Salvador Street and William Street, with the exception of the southeast corner of Fourth Street/William Street. Overall, the existing sidewalks provide good pedestrian connectivity and safe routes to transit, nearby pedestrian destinations, and other points of interest in the project vicinity.

### Existing Transit Services

Existing transit services in the study area are provided by the Santa Clara Valley Transportation Authority VTA, Caltrain, Altamont Commuter Express (ACE), and Amtrak. The closest bus stops serviced by the VTA are located on First and Second Streets, approximately 900 feet west of the project site. The project site is located approximately 0.5 mile away from the First/San Antonio and Second/San Antonio Light Rail Stations and approximately 1.4-mile from the Diridon Transit Center located on Cahill Street. Connections between local and regional bus routes, light rail lines, and commuter rail lines are provided within the Diridon Transit Center. Figure 3 shows the existing transit facilities.

### Bus Service

The downtown area is served by many local bus lines. The bus lines that operate within ¼-mile walking distance of the project site are listed in Table 1, including their route descriptions and commute hour headways. The nearest bus stops are located along Second Street, approximately 900 feet west of the project site. The nearest bus stops for northbound heading buses are on First Street and are approximately ½ -mile away.

**Table 1**  
**Existing Bus Service Near the Project Site**

Transit Route	Route Description	Hours of Operation	Headway <sup>1</sup>
Local Route 66	North Milpitas to Kaiser San Jose	5:00 am - 12:15 am	15 mins
Local Route 68	Gilroy Transit Center to San Jose Diridon Station	4:00 am - 1:30 am	15 mins
<b>Notes:</b> <sup>1</sup> Approximate headways during peak commute periods.			

### VTA Light Rail Transit (LRT) Service

The Santa Clara Valley Transportation Authority (VTA) currently operates the 42.2-mile VTA light rail line system extending from south San Jose through downtown to the northern areas of San Jose, Santa

Clara, Milpitas, Mountain View and Sunnyvale. The service operates nearly 24-hours a day with 15-minute headways during much of the day.

The Green (Winchester-Old Ironsides) and Blue (Santa Teresa-Baypointe) LRT lines operate along First and Second Streets, north of San Carlos Street. The 1<sup>st</sup>/San Antonio and 2<sup>nd</sup>/San Antonio LRT stations are located approximately ½ -mile from the project site. The San Jose Diridon station, approximately 1.5 mile away is served by the Green LRT line and serves as a transfer point to Caltrain, ACE, and Amtrak services.

### **Caltrain Service**

Commuter rail service between San Francisco and Gilroy is provided by Caltrain, which currently operates 92 weekday trains that carry approximately 47,000 riders on an average weekday. The project site is located about ¾ -mile from the San Jose Diridon station. The Diridon station provides 581 parking spaces, as well as 16 bike racks, 48 bike lockers, and 27 bike share docks. Trains stop frequently at the Diridon station between 4:28 AM and 10:30 PM in the northbound direction, and between 6:31 AM and 1:38 AM in the southbound direction. Caltrain provides passenger train service seven days a week and provides extended service to Morgan Hill and Gilroy during commute hours.

### **Altamont Commuter Express Service (ACE)**

ACE provides commuter rail service between Stockton, Tracy, Pleasanton, and San Jose during commute hours, Monday through Friday. Service is limited to four westbound trips in the morning and four eastbound trips in the afternoon and evening with headways averaging 60 minutes. ACE trains stop at the Diridon Station between 6:32 AM and 9:17 AM in the westbound direction, and between 3:35 PM and 6:38 PM in the eastbound direction.

### **Amtrak Service**

Amtrak provides daily commuter passenger train service along the 170-mile Capitol Corridor between the Sacramento region and the Bay Area, with stops in San Jose, Santa Clara, Fremont, Hayward, Oakland, Emeryville, Berkeley, Richmond, Martinez, Suisun City, Davis, Sacramento, Roseville, Rocklin, and Auburn. The Capitol Corridor trains stop at the San Jose Diridon Station seven times during the weekdays between approximately 7:37 AM and 9:05 PM in the westbound direction. In the eastbound direction, Amtrak stops at the Diridon Station seven times during the weekdays between 6:42 AM and 7:15 PM.

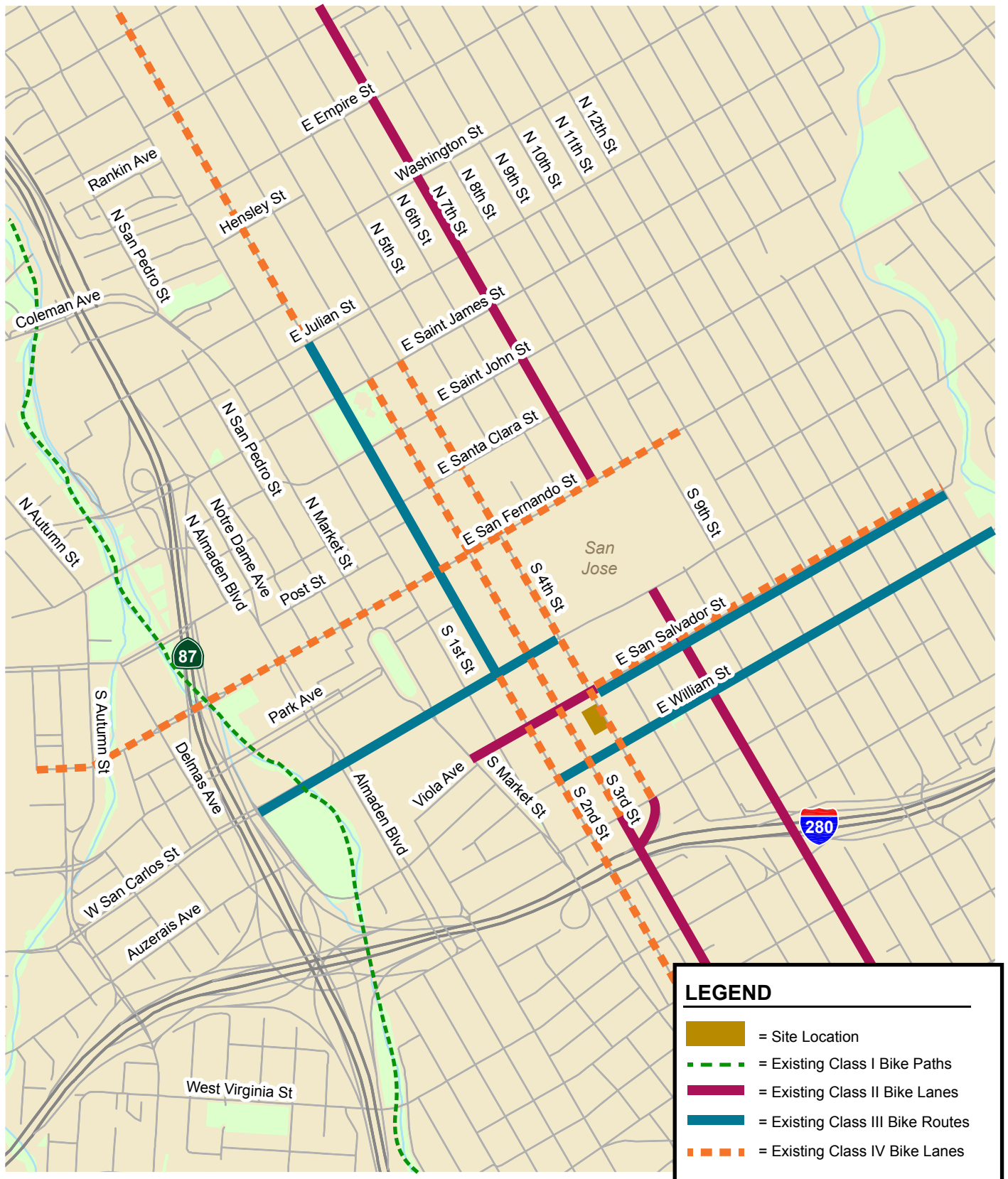
## **Project Trip Generation**

The trip generation analysis estimates the number of external vehicle-trips that will be generated by the proposed project. Baseline (or gross) vehicle-trips were estimated by using average vehicle-trip rates from the *ITE Trip Generation Manual, 10th Edition* for the proposed site land use. The baseline trip estimates were reduced to account for the predicted vehicle mode share of the project based on its location and surrounding transportation system and land uses.

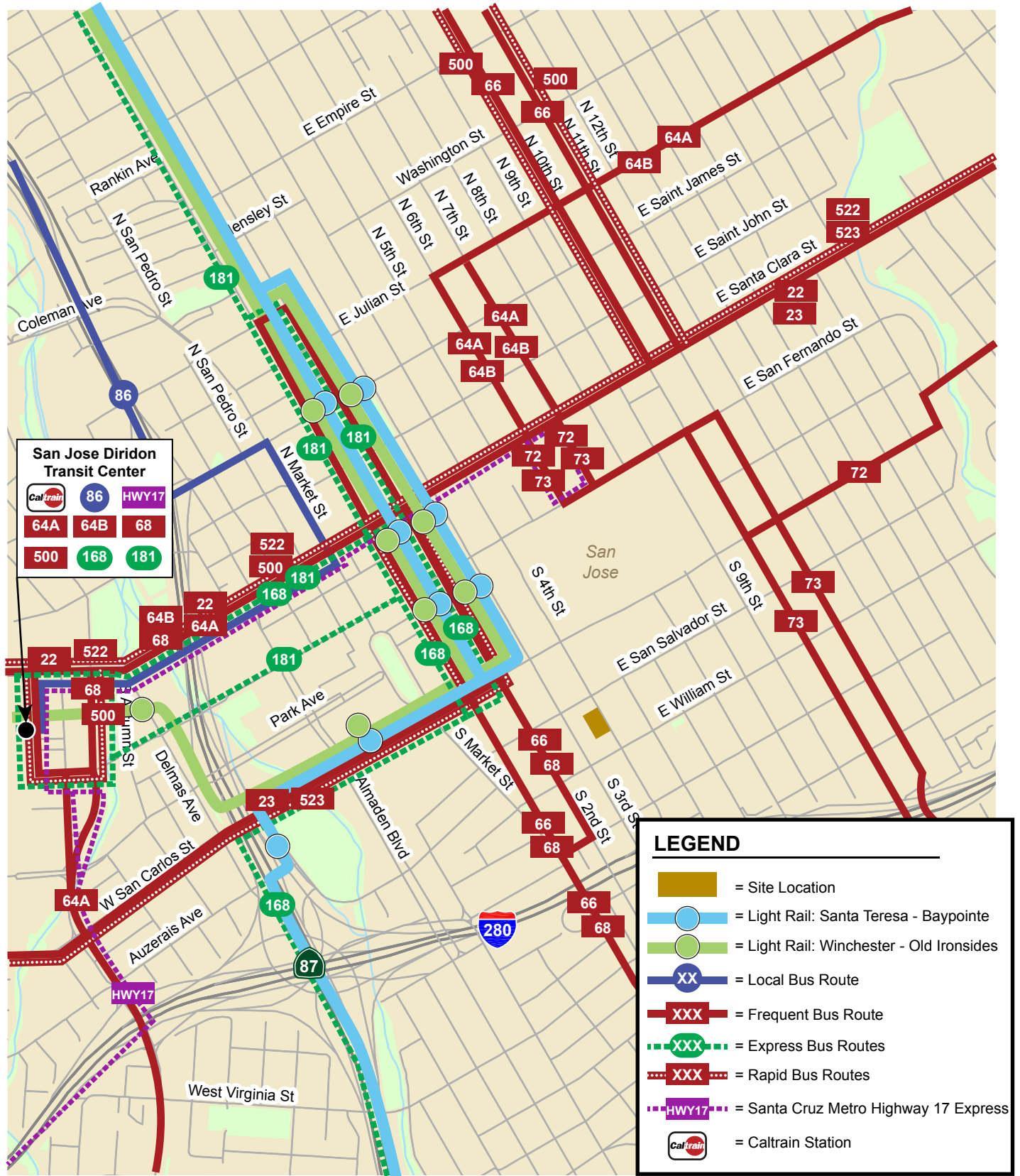
### **Trip Reductions**

#### **Location-Based Adjustment**

The location-based adjustment reflects the project's vehicle mode share based on the place type in which the project is located per the San Jose Travel Demand Model. The project's place type was obtained from the *San Jose VMT Evaluation Tool*. The results of the VMT Evaluation Tool can be found in Appendix A. Based on the VMT Evaluation Tool, the project site is located within a designated central city urban area. Therefore, the baseline project trips were adjusted to reflect a central city urban



**Figure 2**  
**Existing Bicycle Facilities**



**Figure 3**  
**Existing Transit Services**



mode share. Central City Urban is characterized as an area with very high density, excellent accessibility, high public transit access, low single-family homes, older high value housing stock. Housing uses within central city urban areas have a vehicle mode share of 71 percent. Thus, a 29 percent reduction was applied to the baseline trips estimated to be generated by the proposed uses of the project.

### **VMT Adjustment**

A VMT adjustment was applied to the trip generation based on the VMT per capita estimate obtained from the *San Jose VMT Evaluation Tool*. It is assumed that for each percentage of VMT per capita reduced with the project was equivalent to a one percent reduction in peak-hour vehicle trips. The existing residential VMT per capita at the project site is 9.23 VMT per capita. With the proposed project, the estimated residential VMT per capita will be reduced to 8.95, a 3.0% decrease. Thus, a 3.0% reduction was applied to the baseline trips estimated to be generated by the proposed project.

The project also proposes a Transportation Demand Management (TDM) Plan. TDM measures would include unbundling parking costs. With the implementation of a TDM program, the *San Jose VMT Evaluation Tool* estimates the residential VMT per capita will be reduced to 8.54. Since the pricing of the unbundled parking has not been finalized, a VMT adjustment for TDM was not applied to the trip generation.

### **Net Project Trip Generation**

Based on the trip generation rates and reductions, it is estimated that the proposed project would generate 735 daily trips, with 50 trips (12 inbound and 38 outbound) occurring during the AM peak hour and 59 trips (36 inbound and 23 outbound) occurring during the PM peak hour. The trip generation estimates for the proposed project are shown in Table 2.

### **Project Trip Distribution and Trip Assignment**

The trip distribution pattern for the project was based on previous traffic studies prepared for similar projects in downtown San Jose. The project trips were assigned to the roadway network based on the driveway locations of the project site and off-site parking garage, existing travel patterns in the area, freeway access, and the relative locations of complementary land uses. The off-site parking is located beneath the building located at the south east corner of the San Fernando Street and Second Street intersection and can be accessed from both Second Street and Third Street with an entrance located along the south side of the building.

The project trips were assigned to the project site and off-site parking location proportional to the number of spaces currently proposed. The project currently proposes to provide 95 on-site and 97 off-site spaces which equates to an approximately equal allocation of parking on-site and off-site. Therefore, for the purpose of the intersection and driveway traffic operations evaluation, all vehicular trips estimated to be generated by the project were assigned equally to the project site and off-site parking location.

The project trip distribution patterns and trip assignments for the proposed project are shown on Figures 4 and 5, respectively.

### **Site Access and Circulation**

A review of the project site plan was performed to determine if adequate site access and on-site circulation is provided and to identify any access issues that should be improved. This review is based on the site plan dated November 4, 2020 prepared by BDE Architecture shown in Figure 6, and in

accordance with generally accepted traffic engineering standards and City of San Jose design standards.

### **Project Driveway/Site Access Design**

A two-way right-in, right-out driveway along Fourth Street will provide ingress and egress for the proposed on-site parking garage. The City of San Jose Downtown Streetscape Guidelines (as referenced in the City's Complete Street Standards and Guidelines) identify maximum driveway widths of 26 feet for two-lane two-way driveways. This provides adequate width for vehicular ingress and egress and provides a reasonably short crossing distance for pedestrians. The driveway is shown to be 20 feet wide, which is less than the 26-foot maximum width identified by City guidelines. The City of San Jose recommends widening the driveway from 20 feet to 26 feet.

### **Sight Distance at the Driveway Serving the Project**

The project access point should be designed to be free and clear of any obstructions to provide adequate sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on Fourth Street. Any landscaping and signage should be located in such a way to ensure an unobstructed view for drivers exiting the site. Egress at the project driveway should be constructed at-grade to allow exiting vehicles to see pedestrians and bicycles crossing the driveway.

There are no existing trees or visual obstructions along the project frontage that would obscure sight distance at the project driveway. Existing street parking is present on Fourth Street along the project frontage.

The project site plan proposes to reconstruct the sidewalk along its frontage on Fourth Street. New trees would be planted along the frontage. The trees should be maintained so that they do not obstruct the vision of exiting drivers at the project driveway. Since the project will construct a new 20-foot driveway, new red curb should be installed equal to a car length north of the driveway to ensure exiting vehicles will have clear vision of oncoming traffic on Fourth Street. The removal of one on-street metered parking space will be required to accommodate the proposed driveway cut. Adequate sight distance (sight distance triangles) should be provided at the project driveway in accordance with the *American Association of State Highway Transportation Officials* (AASHTO) standards. Sight distance triangles should be measured approximately 10 feet back from the traveled way. Providing the appropriate sight distance reduces the likelihood of a collision at a driveway or intersection and provides drivers with the ability to exit a driveway and locate sufficient gaps in traffic. The minimum acceptable sight distance is often considered the AASHTO stopping sight distance. Sight distance requirements vary depending on the roadway speeds. Fourth Street does not have a posted speed limit. Therefore, it will be assumed that the speed limit is 25 mph. The AASHTO stopping sight distance for a facility with a posted speed limit of 25 mph is 150 feet. Thus, a driver exiting the proposed project driveway must be able to see 150 feet to the north along Fourth Street in order to stop and avoid a collision.

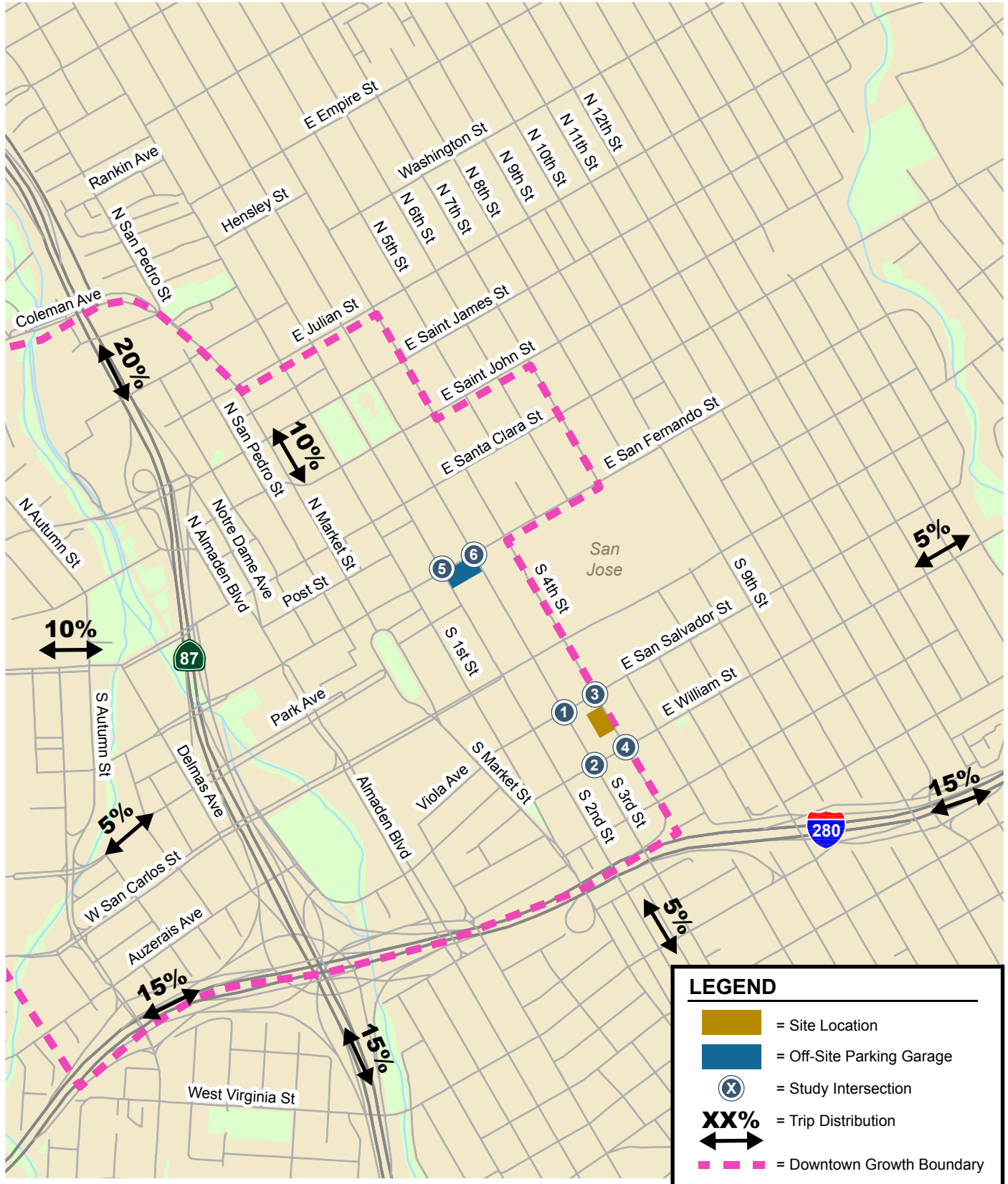
There is no roadway curve on Fourth Street that would obstruct the vision of exiting drivers. Therefore, it can be concluded that the project driveway would meet the AASHTO minimum stopping sight distance standards, and sight distance would be adequate at the project driveway.

**Recommendation:** The proposed trees along the project frontage on Fourth Street should be maintained so that they do not obstruct the vision of drivers exiting the project driveway.

**Recommendation:** Red curb equal to a minimum of one car length north of the proposed project garage driveway should be implemented to provide adequate sight distance. The red curb will require the removal of one existing on-street parking space located directly north of the project garage driveway.

**Table 2**  
**Project Trip Generation**

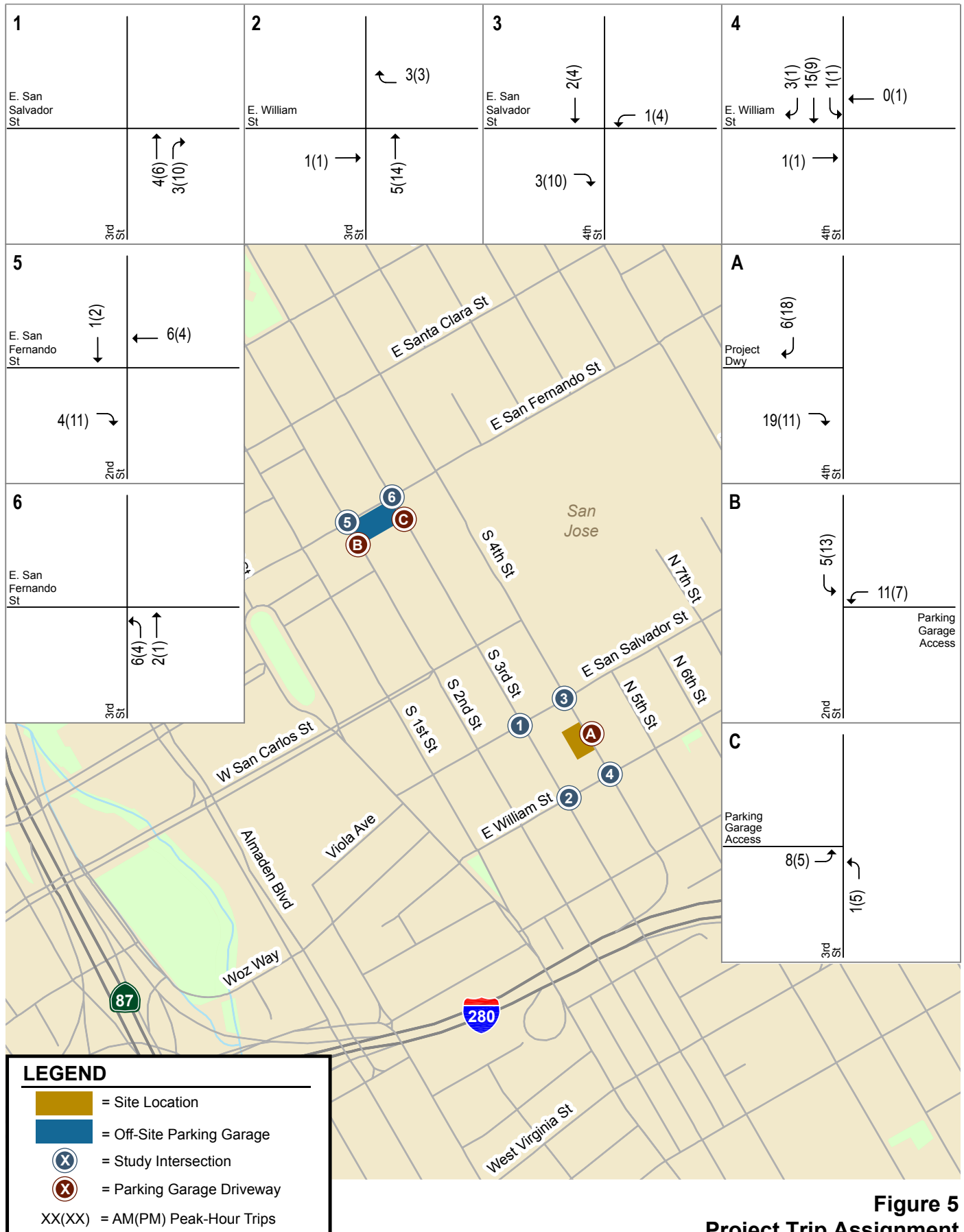
Land Use	ITE Land Use Code	VMT <sup>3</sup>		% Reduction	Size	Daily		AM Peak Hour						PM Peak Hour					
		Existing	Project			Rate	Trip	Pk-Hr Rate	Split		Trip		Pk-Hr Rate	Split		Trip			
									In	Out	In	Out		Total	In	Out	Total		
Proposed Land Uses																			
Multifamily Housing (High-Rise) <sup>1</sup>	222				240 Dwelling Units	4.450	1,068	0.310	24%	76%	18	56	74	0.360	61%	39%	52	34	86
- Location Based Reduction <sup>2</sup>				29%			-310				-5	-17	-22				-15	-10	-25
- VMT Reduction <sup>3</sup>		9.23	8.95	3.0%			-23				-1	-1	-2				-1	-1	-2
Gross Project Trips							735				12	38	50				36	23	59
Notes: <sup>1</sup> Source: ITE Trip Generation Manual, 10th Edition 2017, average trip generation rates. <sup>2</sup> The project site is located within a central city urban area based on the City of San Jose VMT Evaluation Tool (February 29, 2019). The location-based vehicle mode shares are obtained from Table 6 of the City of San Jose Transportation Analysis Handbook (April 2018). The trip reductions are based on the percent of mode share for all of the other modes of travel besides vehicle. <sup>3</sup> VMT per capita for residential use. Existing and project VMTs were estimated using the City of San Jose VMT Evaluation Tool. It is assumed that every percent reduction in VMT per-capita is equivalent to one percent reduction in peak-hour vehicle trips.																			



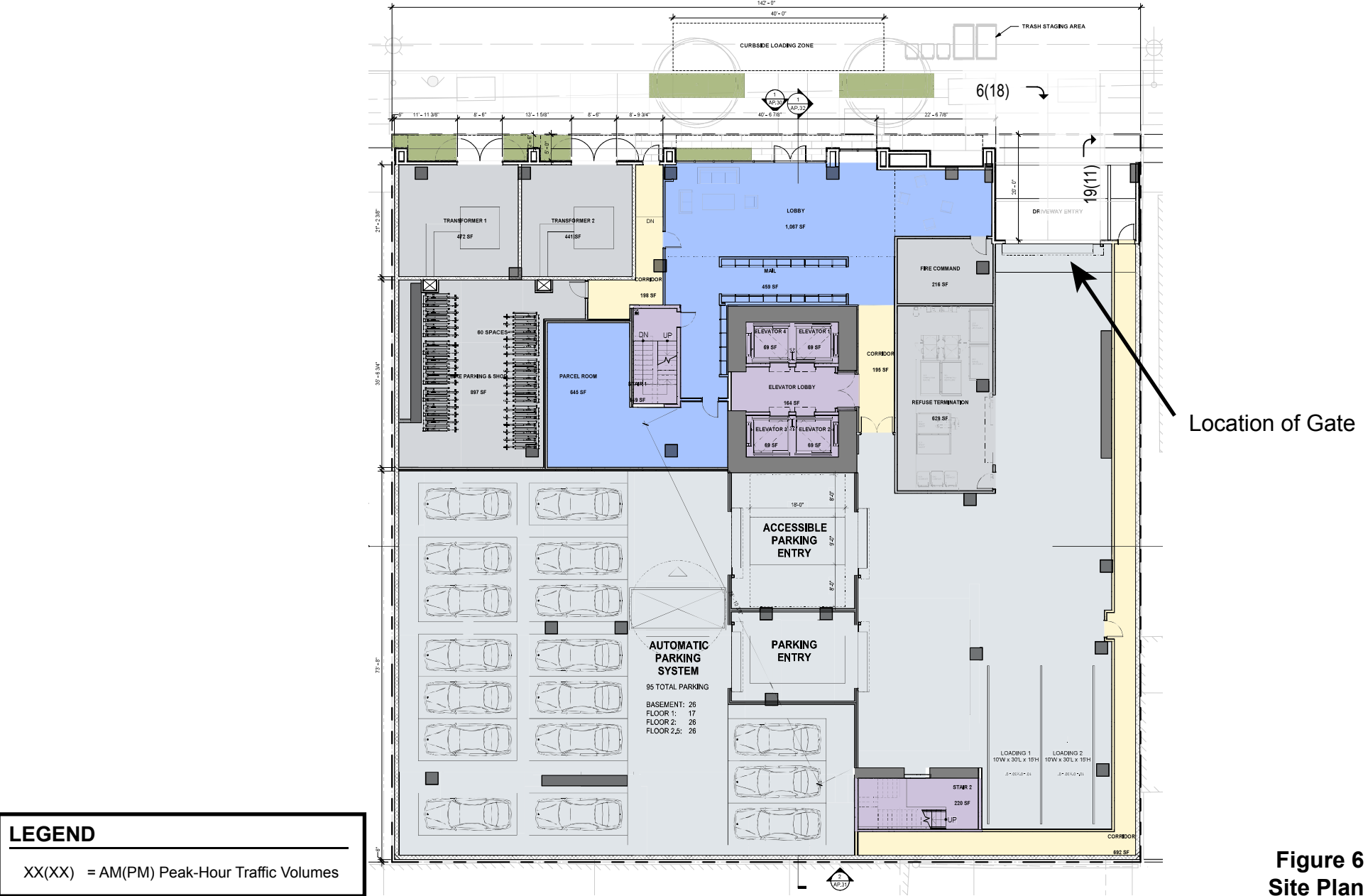
**Figure 4**  
**Trip Distribution**



# The Mark 459-475 S 4th Street



**Figure 5**  
**Project Trip Assignment**



## Project Driveway Operations

The project trip assignment at the proposed project driveway is shown in Figure 6. Based on the estimated project trips, it is projected that a maximum of 18 inbound trips (during the PM peak-hour) would enter the parking garage. A maximum of 19 outbound trips would exit the site onto Fourth Street during the AM peak hour.

The proposed site plan shows a gate to the parking garage will be located approximately 20 feet from the edge of sidewalk. Based on the site plan, the entry gates would consist of one inbound lane and one outbound lane at the driveway. The flow rate at which vehicles enter the garage will depend primarily on the processing ability, or service rate, of the entry gates. The proposed 20 feet distance between the sidewalk and gate will not provide adequate spacing for vehicles to queue at the gate. Therefore, the gate must be able to process a minimum of 18 vehicles per hour (approximately one vehicle per 200 seconds, on average) to avoid inbound queueing during the PM peak hour. Similarly, the gates must be able to process a minimum of 19 vehicles per hour (approximately one vehicle per 189 seconds, on average) to avoid outbound queueing during the AM peak hour. The project site plans do not specify the type of gate that the parking garage will utilize.

Some minor queueing could occur due to a combination of the inherent unpredictability of vehicle arrivals at the project driveway. The projected flow rate at the project driveway assumes an evenly distributed arrival rate. However, it is unlikely that inbound project traffic would be spread out evenly throughout the peak-hour. There would likely be instances where multiple vehicles (two to three vehicles for example) would arrive at the same time. Therefore, the City of San Jose recommends that the gate to the garage be located a minimum of 50 feet from the back of sidewalk to provide queueing space for at least two vehicles to avoid vehicle queueing onto the sidewalk. Additionally, appropriate visible and/or audible warning signs also should be provided at the project driveway to alert pedestrians and bicyclists of vehicles exiting the garage. Furthermore, since Fourth Street is a one-way street, a right-turn only sign should be implemented near the driveway exit.

## Vehicular On-Site Circulation

Mechanical vehicle stackers will be used for all parking within the garage. The project driveway will lead to a small open space where vehicles will idle while waiting for one of two mechanical lifts. The area in front of the first, or eastern, mechanical stacker measures approximately 45 feet in length, which may be adequate to queue two vehicles at the eastern stacker. Since the western lift will be located directly adjacent to truck loading spaces, there will be space for only one vehicle to queue while waiting for the lift. Furthermore, building columns and the loading spaces will inhibit movement to and from the western lift. Due to the limited queueing space available at the lifts and restricted space at the western lift, the project should consider designating the eastern lift as an ingress only lift and the western lift as an exit only lift. Entering vehicles should be required to wait on the garage entry drive aisle if the lifts will not be designated for entry and exit. Approximately 30 feet of queueing space, adequate for one vehicle, will be provided on the entry aisle should the entry gate be located at approximately 50 feet from the edge of sidewalk as described above.

Since the automatic stacking lifts will require knowledge of how to use them, those who are permitted to park in the garage should be provided instructions on how to use the lifts. After project opening, it is likely that residents will slowly learn to queue in the most efficient manner and give way to drivers that need more room to exit.

**Recommendation:** Due to the limited queueing space available at the lifts and restricted space at the western lift, the project should consider designating the eastern lift as an ingress only lift and the western lift as an exit only lift. Entering vehicles should be

required to wait on the garage entry drive aisle if the lifts will not be designated for entry and exit. Those who are allowed to park in the garage should be provided with instructions on how to operate the automatic stacking lift.

## Off-Site Parking Garage Driveway Operations

Driveways A and B on Second Street and Third Street, respectively, provides access to the below-ground parking garage via a drive aisle running along the south side of the building between Second Street and Third Street. Because Second Street and Third Street are one-way streets, vehicles entering and exiting the parking garage can only make left turns at Driveways A and B. Therefore, there is no conflicting traffic for the inbound traffic turning from Second Street and Third Street onto the drive aisle; and the added project trips (a maximum of 19 inbound and outbound trips during the peak hours) are not expected to adversely affect the traffic flow on Second Street and Third Street.

The parking garage entrance on the drive aisle is about 175 feet east of Second Street and 150 feet west of Third Street. The project would result in no more than one vehicle every three minutes to enter the garage. Since the project is not proposing to increase the number of parking spaces currently provided within the garage, the project trips will not result in a noticeable increase in inbound queueing at the gate or cause the vehicle queues to extend to the Second or Third Streets. The project trips utilizing the garage will simply replace vehicles that were already utilizing the garage.

As shown in Figure 5, the project would add only a minimal number of left-turn trips (up to 5 peak-hour trips) to the northbound left-turn movement at the Third Street/San Fernando Street intersection. Therefore, the project is not expected to result in vehicle queueing issues at the intersection.

## Parking

Projects in the downtown area are located in close proximity to employment, schools, recreation, and retail services, allowing individuals to live and satisfy their daily needs near their place of residence. The availability of bicycle lanes and sidewalks throughout downtown and the project's close proximity to major transit services will provide for and encourage the use of multi-modal travel options (bicycling and walking) and reduce the use of single-occupant automobile travel and demand for off-street parking described below.

### Vehicle Parking

According to the City of San Jose Downtown Zoning Regulations (Table 20-140), the project is required to provide 1 parking space per residential unit. Based on the City's off-street parking requirements, a total of 240 off-street parking spaces would be required.

### Reduction in Required Off-Street Parking Spaces

Based on City Code 20.90.220.A.1, the project may receive up to a 50 percent reduction in the required off-street parking spaces with a development permit or a development exception if no development permit is required. For an off-street parking reduction of up to 20 percent, the following provisions must be met:

1. The structure or use is located within two thousand feet of a proposed or an existing rail station or bus rapid transit station, or an area designated as a neighborhood business district, or as an urban village, or as an area subject to an area development policy in the city's general plan or the use is listed in Section 20.90.220.G; and



2. The structure or use provides bicycle parking spaces in conformance with the requirements of Table 20-90.

The project site is located within the Downtown Growth Boundary and will meet the City Bicycle Parking requirements per Table 20-90. Therefore, the project will conform to Code 20.90.220.A.1 Subsections A and B and may be granted up to a 20 percent reduction in off-street parking spaces. With the allowed reduction, the project is required to provide 192 off-street parking spaces.

The City will allow the project to supplement its proposed on-site parking with off-site parking to meet its required 192 off-street parking requirement. The project applicant proposes to supplement its on-site parking with parking within the existing underground parking garage (Garage 88) located at 88 San Fernando Street between S. Second Street and S. Third Street which it currently controls.

The on-site parking garage capacity has yet to be finalized. However, it is anticipated that a range of 20 to 95 spaces will be provided within the on-site garage. According to the site plan, the project currently proposes 95 parking spaces within a stacked mechanical parking lift system. Since the parking stacking machine is fully automated, it is assumed that vehicles that meet requirement for a uniform-sized parking stall will be able to park within the stacking machine. Since the project site plan currently shows 95 parking spaces within the garage, the project should secure a minimum of 97 off-street parking spaces at Garage 88.

The project applicant will establish a shared parking agreement for the use of up to 172 spaces, as needed based on the final garage design of the proposed project, within Garage 88 to meet the City's off-street parking requirements for the project.

### **ADA Compliance**

Since all of the project's parking is enclosed within an automated mechanical stacking machine, the queuing area of the eastern lift should provide 8 feet of clearance adjacent to the loading space to accommodate an accessible van. The site plan shows 8 feet of clearance on both sides of the eastern lift.

### **Surrounding On-Street Parking**

The project site is located within the SUN Residential Parking Program (RPP) zone, where a permit is required to use on-street parking from 8 AM to 8 PM every day except Sundays and holidays. To obtain a parking permit, the applicant must live in or own a residential property or operate a business in a parking permit zone. Generally, this means that the residence or business must be located on the same side of the street and block face where permit parking signs are posted. The locations of on-street parking, where an RPP permit is required, are shown on Figure 7.

However, the lease agreements for residents of the proposed project will prohibit residents from applying for a SUN RPP permit. In addition, the project will not pursue a Condition of Approval from Planning that would allow the project to make a permit amendment in the future if on-site parking reductions occur.

### **Bicycle Parking**

Based on the project's downtown location and proximity to San Jose State University (SJSU), it is likely that many residents of the project, if not all, will be students attending SJSU. Therefore, the project is required to meet the City's Bicycle Parking requirements.

The City Municipal Code (Table 20-190) requires one bicycle parking space per four residential units. Bicycle parking spaces shall consist of at least eighty percent short-term and at most twenty percent long-term spaces. Thus, the proposed project is required to provide a total of 60 bicycle parking

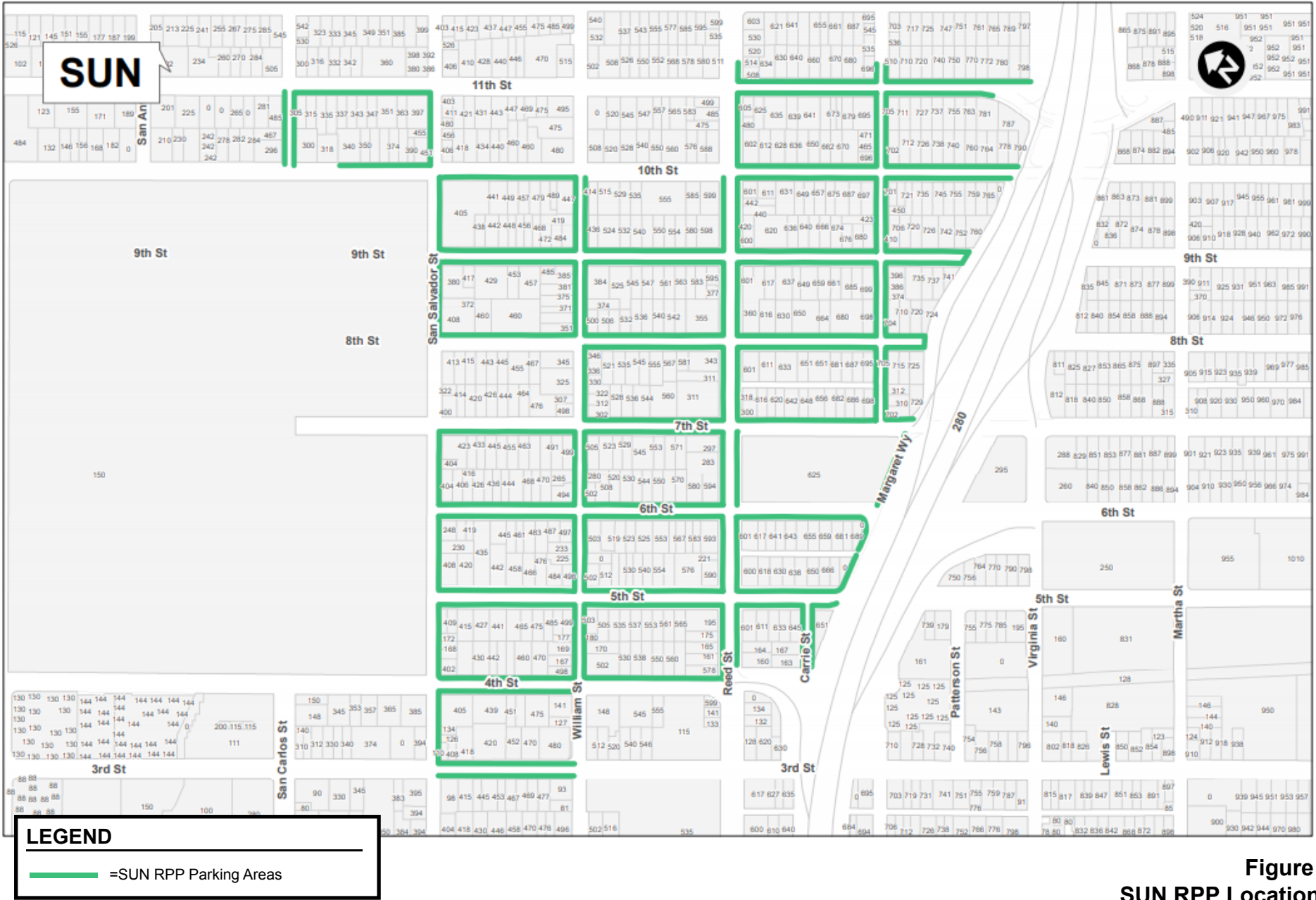


Figure 7  
SUN RPP Locations

spaces: 48 short-term bicycle parking spaces and 12 long-term bicycle parking spaces to meet the City standards. The City's definition of short-term and long-term bicycle parking is described below.

### **City of San Jose Long-Term and Short-Term Bicycle Parking**

Long-term bicycle parking facilities are secure bicycle storage facilities for tenants/employees of a building that fully enclose and protect bicycles and may include:

- A covered, access-controlled enclosure such as a fenced and gated area with short-term bicycle parking facilities,
- An access-controlled room with short-term bicycle parking facilities, and
- Individual bicycle lockers that securely enclose one bicycle per locker.

Short-term bicycle parking facilities are accessible and usable by visitors or guests and may include:

- Permanently anchored bicycle racks,
- Covered, lockable enclosures with permanently anchored racks for bicycles,
- Lockable bicycle rooms with permanently anchored racks, and
- Lockable, permanently anchored bicycle lockers.

The project proposes 60 bicycle parking spaces within a bicycle storage room to meet the City's bicycle parking requirements. However, it is unclear on whether the bicycle storage room will be accessible to visitors or guests. The project should consider adding short-term bicycle parking racks on the project frontage for visitors or guests.

**Recommendation:** The project should provide short-term bicycle parking racks on the project frontage.

### **Off-Street Loading**

The project proposes to locate two loading spaces within the ground floor of the parking garage. The loading docks will be located at the end of the garage drive aisle. The City of San Jose off-street loading standards within the Downtown Area requires residential uses between two hundred and five hundred units to provide two off-street loading spaces (City Code 20.70.435). Therefore, the two off-street loading spaces will meet the City's off-street loading requirements.

### **Truck and Emergency Vehicle Access**

The site plan shows a trash enclosure on the first floor of the project. However, trash bins will need to be wheeled out to Fourth Street for trash pick-up since adequate space for garbage trucks to turn around for exit will not be provided within the garage.

The use of the on-site loading spaces by larger trucks will be restricted due to the limited space and building columns that will inhibit maneuvers into and out of the loading spaces. The loading spaces also are shown to be 30 feet in length. Therefore, use of the loading spaces should be restricted to trucks no larger than a typical SU-30 truck. The garage height will need to provide a minimum of 14 feet of clearance height to accommodate an SU-30 truck.

Fire trucks will access the proposed site via the Fourth Street frontage.

**Recommendation:** Trash bins will need to be wheeled out to Fourth Street for trash pick-up since adequate space for garbage trucks to turn around for exit will not be provided within the garage

**Recommendation:** The use of the on-site loading spaces should be restricted to trucks no larger than a typical SU-30 truck due to the limited space and building columns that will inhibit maneuvers into

and out of the loading spaces. The garage height will need to provide a minimum of 14 feet of clearance height to accommodate an SU-30 truck.

## **Pedestrian and Bicycle Access and Circulation**

The Downtown Streetscape Master Plan (DSMP) provides design guidelines for existing and future development for the purpose of enhancing the pedestrian experience in the Greater Downtown Area. Per the DSMP and shown in Figure 8, Fourth Street is a designated Downtown Pedestrian Network Street (DPNS), which are intended to support a moderate level of pedestrian activity as well as retail and transit connections. The DPNS streets provide a seamless network throughout the downtown that is safe and comfortable for pedestrians and connects all major downtown destinations. Design features of a DPNS create an attractive and safe pedestrian environment to promote walking as the primary travel mode. The DSMP policies state that vehicles crossing the sidewalk are often a safety hazard for pedestrians and measures should be taken within the design for any new project to minimize the number of curb cuts and driveways.

A sidewalk is provided along the project frontage along Fourth Street. High visibility crosswalks and pedestrian signal heads are present on all legs of all signalized intersections within the project vicinity, including the intersections of Fourth Street/San Salvador Street, Fourth Street/William Street, Third Street/San Salvador Street, and Third Street/William Street. Overall, the existing sidewalks have good connectivity and provide pedestrians with safe routes to the surrounding pedestrian destinations in the area.

Class IV bicycle facilities (separated bike lanes) are provided on Third Street and Fourth Street. Class II bike lanes are provided along San Salvador Street between Market Street and 10<sup>th</sup> Street. Class III bicycle facilities (bike routes with “sharrow” pavement markings) are present on William Street and San Carlos Street. The Guadalupe River Park Trail, a Class I pedestrian and bicycle trail, is accessible to the west on either Woz Way or Santa Clara Street, with the former being just 750 feet west of the project site.

The project frontage is located along the City of San Jose’s Better Bikeways. Fourth Street has been recently upgraded to provide cyclists with a safer, more convenient, and more comfortable commute. Fourth Street is separated from the vehicular travel lanes north of San Carlos Street. Additionally, there is an additional separated bike lane on the east side of Fourth Street between San Salvador Street and San Fernando Street for bicyclists in the counterflow direction of vehicular traffic. City of San Jose staff have indicated that the project may be required to provide a fair-share contribution for the recently implemented Class IV bike network along the project’s frontage along Fourth Street.

In addition, bikeshare and Zipcar stations are provided throughout the downtown area. Two bikeshare stations are located within 1,000 feet of the project site, one approximately 900 feet north of the project site on the west side of Fourth Street, and one approximately 800 feet from the project site, on the southeast corner of Fifth Street and San Salvador Street. The nearest Zipcar locations are located approximately 1,000 feet from the project site within SJSU parking lots, located on Fourth Street and Seventh Street.










The existing pedestrian and bicycle facilities provide good connectivity for residents to access transit and nearby points of interest.

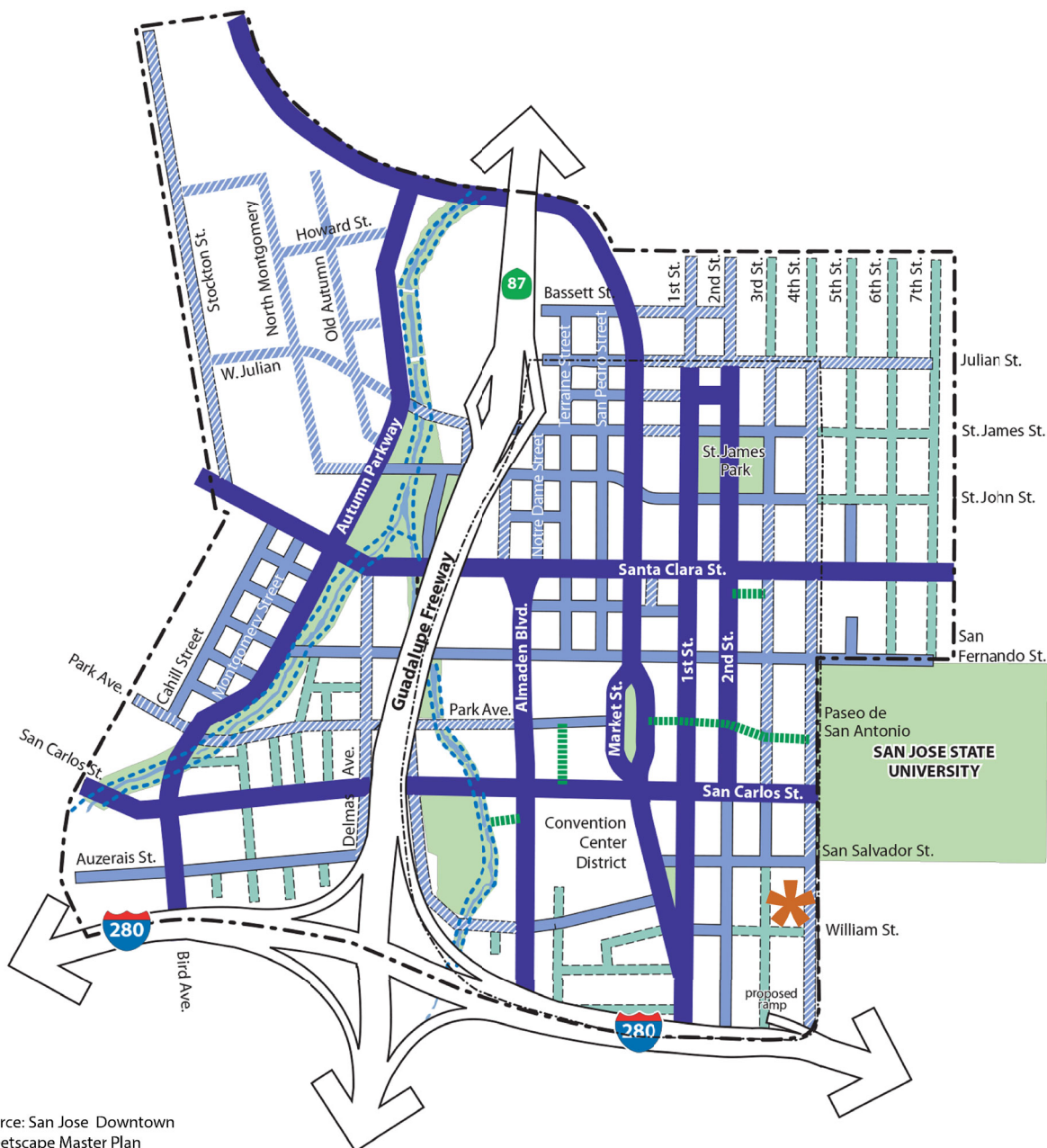
### **Pedestrian Travel To/From Off-Site Parking**

The project proposes to provide vehicle parking off-site within an underground parking garage located beneath the building at the southeast corner of the S. Second Street/San Fernando Street intersection (old Safeway garage). The parking garage, shown in Figure 1, is at 88 San Fernando Street, southside of San Fernando Street between 2<sup>nd</sup> and 3<sup>rd</sup> Streets. The existing sidewalks along Fourth Street, Third Street, Second Street and the Paseo de San Antonio provide adequate connectivity between the



## Legend

	Urban Structure Streets		Paseos
	Downtown Pedestrian Network Streets/High Pedestrian Volume		Guadalupe River Pedestrian Paths
	Downtown Pedestrian Network Streets/Moderate Pedestrian Volume		Lighting Study Boundary
	Downtown Residential Streets		1989 Streetscape Study Boundary
			Project Site Location



Source: San Jose Downtown Streetscape Master Plan

**Figure 8**  
**Downtown Streetscape Master Plan**

project site and the parking garage.

## Transit Facilities

The project is in proximity to major transit services that will provide the opportunity for multi-modal travel to and from the project site. VTA light rail services are available at the San Antonio LRT station, approximately ½ -mile away. Several VTA bus services, described earlier, run on First Street and Second Street. Furthermore, several bus routes run along Santa Clara Street, approximately 0.7-miles away. The San Jose Diridon Station is located along the Green (Winchester-Old Ironsides) LRT line and serves as a transfer point to Caltrain, ACE, and Amtrak services. The pedestrian and bicycle facilities located along streets adjacent to the project site provide access to major transit stations and provide for a balanced transportation system as outlined in the Envision 2040 General Plan goals and policies.

## Vehicular Queuing Analysis

Vehicle queues were estimated using TRAFFIX, which is based on the HCM 2000 methodology. The basis of the analysis is as follows: the estimated maximum queue length obtained from TRAFFIX is compared to the existing or planned available storage capacity for the movement. This analysis thus provides a basis for estimating future storage requirements at intersections. The results of the queue analysis are summarized in Table 3.

The queuing analysis indicates that the projected queues at nearby intersections would not exceed the available storage capacity under existing and background scenarios. The addition of project traffic would increase the projected maximum queue lengths at nearby intersections by at most one vehicle.

**Table 3**  
**Vehicle Queuing**

Scenario	Third Street & San Salvador Street		Third Street & William Street		Fourth Street & San Salvador Street				Fourth Street & William Street				Second Street & San Fernando Street				Third Street & San Fernando Street	
	NBR		WBR		EBR		WBL		SBL		SBR		WBL		EBR		NBL	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Existing	10	3	3	1	2	4	3	7	3	12	3	12	4	5	4	9	7	5
Background	12	3	4	2	2	4	3	8	3	15	3	15	4	7	4	10	8	6
Capacity	22	22	11	11	10	10	11	11	22	22	22	22	11	11	10	10	27	27
Notes:																		
All intersection do not have left turn pockets. The reported capacity is based on the shared through/turn movements.																		

## Effects of Changes to On-Site Parking

The final garage design of on-site parking has not been finalized. However, it is anticipated that the on-site garage will provide between 20 to 95 spaces. The analysis as presented within this study considers the upper range of 95 on-site parking spaces and represents a worst-case scenario in regard to trips to the project site and their effect on surrounding streets in the immediate vicinity of the project site. It is possible that less than the currently identified 95 parking spaces would be provided on-site. Any reduction in on-site parking will result in a proportional increase in the number of off-site parking spaces provided. Thus, should the lower end of 20 parking spaces be provided on-site, the project would secure a corresponding additional 75 off-site parking spaces at Garage 88, for a total of 172 off-site parking spaces. An increase in off-site parking will result in a proportional increase in project traffic at the off-site parking location. However, the shift of parking to the off-site location would result in an increase of project trips at the off-site location of no more than 15 outbound trips during the AM peak

hour and 15 inbound trips during the PM peak hour. Since the project is not proposing to increase the number of parking spaces currently provided within the off-site garage, the additional project trips would not result in a noticeable increase in inbound queueing at the gate or cause the vehicle queues to extend to the Second or Third Streets. Similarly, a reduction in the number of on-site parking spaces would result in a reduction of trips to the project site and would not have an adverse effect on the analysis of driveway operations previously discussed in this memo.

## Construction Operations

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

## Conclusions

The proposed residential development will contain 240 residential units for student housing. The project applicant proposes to supplement its on-site parking with parking within the existing underground parking garage (Garage 88) located at 88 San Fernando Street between S. Second Street and S. Third Street which it currently controls to meet its required off-street parking requirement per City code.

The on-site parking garage capacity has yet to be finalized. However, it is anticipated that a range of 20 to 95 spaces will be provided within the on-site garage. Since the project site plan currently shows 95 parking spaces within the garage, the project should secure a minimum of 97 off-street parking spaces at Garage 88. The project applicant will establish a shared parking agreement for the use of up to 172 spaces, as needed based on the final garage design of the proposed project, within Garage 88 to meet the City's off-street parking requirements for the project.

The project site is located within the Downtown Growth Area Boundary, for which an Environmental Impact Report (EIR), *Downtown San Jose Strategy Plan 2040 (DTS 2040)*, has been completed and approved. With adoption of DTS 2040, this project is covered under DTS 2040 and no CEQA transportation analysis is required.

A summary of the site access and circulation review along with recommended adjustments is provided below.

## Recommendations

- The City of San Jose recommends widening the driveway from 20 feet to 26 feet.
- The proposed trees along the project frontage on Fourth Street should be maintained so that they do not obstruct the vision of drivers exiting the project driveway.
- Red curb equal to a minimum of one car length north of the proposed project garage driveway should be implemented to provide adequate sight distance. The red curb will require the removal of one existing on-street parking space located directly north of the project garage driveway.
- The City of San Jose recommends that the gate to the garage be located a minimum of 50 feet from the back of sidewalk to provide queuing space for at least two vehicles to avoid vehicle queuing onto the sidewalk.
- Due to the limited queueing space available at the lifts and restricted space at the western lift, the project should consider designating the eastern lift as an ingress only lift and the western lift as an exit only lift. Entering vehicles should be required to wait on the garage entry drive aisle if the lifts will not be designated for entry and exit. Those who are allowed to park in the garage should be provided with instructions on how to operate the automatic stacking lift.
- The project should provide short-term bicycle parking racks on the project frontage.
- City of San Jose staff have indicated that the project may be required to provide a fair-share contribution for the recently implemented Class IV bike network along the project's frontage along Fourth Street.



- Trash bins will need to be wheeled out to Fourth Street for trash pick-up since adequate space for garbage trucks to turn around for exit will not be provided within the garage
- The use of the on-site loading spaces should be restricted to trucks no larger than a typical SU-30 truck due to the limited space and building columns that will inhibit maneuvers into and out of the loading spaces. The garage height will need to provide a minimum of 14 feet of clearance height to accommodate an SU-30 truck.
- Lease agreements for residents of the proposed project will prohibit residents from applying for a SUN RPP permit. In addition, the project will not pursue a Condition of Approval from Planning that would allow the project to make a permit amendment in the future if on-site parking reductions occur.

## **Appendix A**

### **VMT Evaluation Tool**

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

## PROJECT:

Name:	The Mark Residential Development	Tool Version:	2/29/2019
Location:	4th Street, between San Salvador and William Stre	Date:	2/8/2021
Parcel:	46747057	Parcel Type:	Central City Urban
Proposed Parking Spaces	Vehicles: 95	Bicycles:	60

## LAND USE:

Residential:		Percent of All Residential Units	
Single Family	0 DU	Extremely Low Income ( $\leq$ 30% MFI)	0 % Affordable
Multi Family	240 DU	Very Low Income ( $>$ 30% MFI, $\leq$ 50% MFI)	0 % Affordable
Subtotal	240 DU	Low Income ( $>$ 50% MFI, $\leq$ 80% MFI)	0 % Affordable
Office:	0 KSF		
Retail:	0 KSF		
Industrial:	0 KSF		

## VMT REDUCTION STRATEGIES

### Tier 1 - Project Characteristics

Increase Residential Density	
Existing Density (DU/Residential Acres in half-mile buffer) . . . . .	21
With Project Density (DU/Residential Acres in half-mile buffer) . . . . .	22
Increase Development Diversity	
Existing Activity Mix Index . . . . .	0.78
With Project Activity Mix Index . . . . .	0.78
Integrate Affordable and Below Market Rate	
Extremely Low Income BMR units . . . . .	0 %
Very Low Income BMR units . . . . .	0 %
Low Income BMR units . . . . .	0 %
Increase Employment Density	
Existing Density (Jobs/Commercial Acres in half-mile buffer) . . . . .	55
With Project Density (Jobs/Commercial Acres in half-mile buffer) . . . . .	55

### Tier 2 - Multimodal Infrastructure

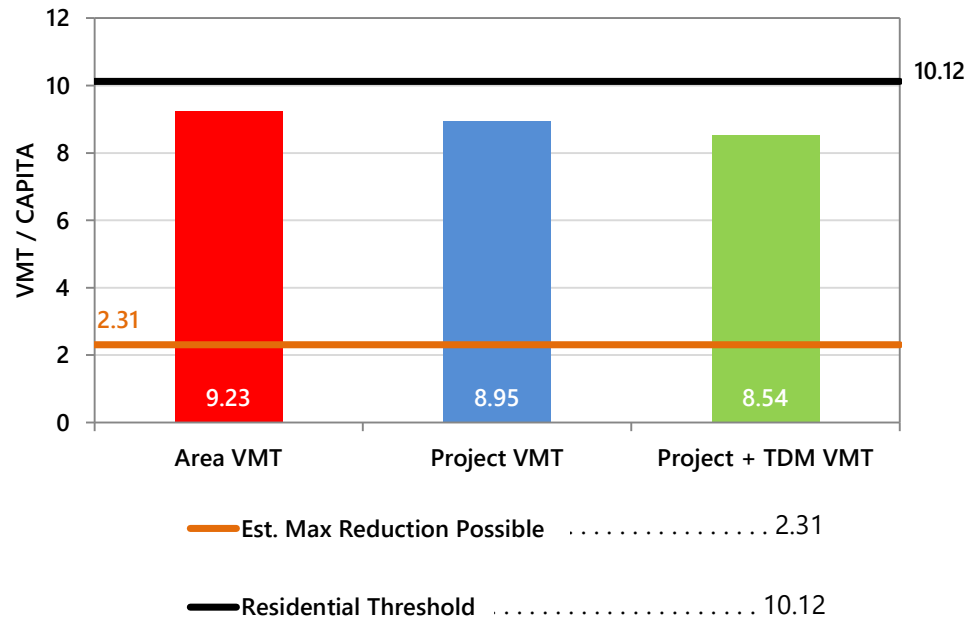
### Tier 3 - Parking

### Tier 4 - TDM Programs

Unbundle On-Site Parking Costs	
Monthly Parking Cost . . . . .	100
Does the Surrounding Street Parking have Rpp, Meters, or Time Limits? . . . . .	0

RESIDENTIAL ONLY

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



## **Appendix B**

### **Volume Summary**



The Mark LTA AM Conditions

Intersection Number:	1													
Traffic Node Number:	3781													
Intersection Name:	Third Street													
Peak Hour:	AM													Date of Analysis: 01/29/21
Count Date:	05/12/15													
Scenario:	The Mark													
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions*	0	0	0	114	76	0	77	1586	45	0	63	60	2021	
ATI	0	0	0	6	4	0	5	102	2	0	2	1	122	
Background Conditions	0	0	0	120	80	0	82	1688	47	0	65	61	2143	
Project Trips	0	0	0	0	0	0	3	4	0	0	0	0	7	
Existing + Project	0	0	0	114	76	0	80	1590	45	0	63	60	2028	
Background + Project	0	0	0	120	80	0	85	1692	47	0	65	61	2150	
*Existing Volumes include a 1%/year growth rate from 2015-2020.														
Intersection Number:	2													
Traffic Node Number:	3827													
Intersection Name:	Third Street													
Peak Hour:	AM													Date of Analysis: 01/29/21
Count Date:	06/05/18													
Scenario:	The Mark													
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	0	0	0	57	90	0	41	1227	45	0	49	25	1534	
ATI	0	0	0	7	8	0	3	147	5	0	1	2	173	
Background Conditions	0	0	0	64	98	0	44	1374	50	0	50	27	1707	
Project Trips	0	0	0	3	0	0	0	5	0	0	1	0	9	
Existing + Project	0	0	0	60	90	0	41	1232	45	0	50	25	1543	
Background + Project	0	0	0	67	98	0	44	1379	50	0	51	27	1716	
Intersection Number:	3													
Traffic Node Number:	3540													
Intersection Name:	Fourth Street													
Peak Hour:	AM													Date of Analysis: 01/29/21
Count Date:	06/05/18													
Scenario:	The Mark													
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	68	389	53	3	122	25	0	0	0	30	84	1	775	
ATI	0	0	0	0	2	0	0	0	0	0	0	0	2	
Background Conditions	68	389	53	3	124	25	0	0	0	30	84	1	777	
Project Trips	0	3	0	0	0	2	0	0	0	7	0	0	12	
Existing + Project	68	391	53	3	122	26	0	0	0	33	84	1	781	
Background + Project	68	391	53	3	124	26	0	0	0	33	84	1	783	

The Mark LTA AM Conditions

Intersection Number:	4													
Traffic Node Number:	3545													
Intersection Name:	Fourth Street													
Peak Hour:	AM													Date of Analysis: 01/29/21
Count Date:	09/13/18													
Scenario:	The Mark													
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	20	358	30	0	106	61	0	0	0	48	54	0	677	
ATI	0	0	0	0	0	0	0	0	0	0	0	0	0	
Background Conditions	20	358	30	0	106	61	0	0	0	48	54	0	677	
<b>Project Trips</b>	3	15	1	0	0	0	0	0	0	0	1	0	20	
Existing + Project	23	373	31	0	106	61	0	0	0	48	55	0	697	
Background + Project	23	373	31	0	106	61	0	0	0	48	55	0	697	

Intersection Number:	5													
Traffic Node Number:	3770													
Intersection Name:	Second Street													
Peak Hour:	AM													Date of Analysis: 01/29/21
Count Date:	03/04/14													
Scenario:	The Mark													
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	41	192	25	0	189	61	0	0	0	113	146	0	767	
ATI	0	1	0	0	3	0	0	0	0	9	22	0	35	
Background Conditions	41	193	25	0	192	61	0	0	0	122	168	0	802	
<b>Project Trips</b>	0	1	0	0	6	0	0	0	0	4	0	0	11	
Existing + Project	41	193	25	0	195	61	0	0	0	117	146	0	778	
Background + Project	41	194	25	0	198	61	0	0	0	126	168	0	813	
*Existing Volumes include a 1%/year growth rate from 2014-2020.														

Intersection Number:	6													
Traffic Node Number:	3773													
Intersection Name:	Third Street													
Peak Hour:	AM													Date of Analysis: 01/29/21
Count Date:	02/25/14													
Scenario:	The Mark													
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	0	0	0	42	177	0	305	1006	88	0	153	28	1799	
ATI	0	0	0	1	5	0	17	115	11	0	14	4	167	
Background Conditions	0	0	0	43	182	0	322	1121	99	0	167	32	1966	
<b>Project Trips</b>	0	0	0	0	0	0	0	2	6	0	0	0	8	
Existing + Project	0	0	0	42	177	0	305	1008	94	0	153	28	1807	
Background + Project	0	0	0	43	182	0	322	1123	105	0	167	32	1974	
*Existing Volumes include a 1%/year growth rate from 2014-2020.														

The Mark LTA PM Conditions

Intersection Number:	1													
Traffic Node Number:	3781													
Intersection Name:	Third Street													
Peak Hour:	PM													Date of Analysis: 01/29/21
Count Date:	05/12/15													
Scenario:	The Mark													
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions*	0	0	0	143	181	0	33	433	38	0	112	58	998	
ATI	0	0	0	1	1	0	0	7	0	0	0	0	9	
Background Conditions	0	0	0	144	182	0	33	440	38	0	112	58	1007	
Project Trips	0	0	0	0	0	0	10	6	0	0	0	0	16	
Existing + Project	0	0	0	143	181	0	43	439	38	0	112	58	1014	
Background + Project	0	0	0	144	182	0	43	446	38	0	112	58	1023	
*Existing Volumes include a 1%/year growth rate from 2015-2020.														
Intersection Number:	2													
Traffic Node Number:	3827													
Intersection Name:	Third Street													
Peak Hour:	PM													Date of Analysis: 01/29/21
Count Date:	06/05/18													
Scenario:	The Mark													
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	0	0	0	58	89	0	43	376	26	1	190	50	833	
ATI	0	0	0	4	6	0	2	27	1	0	4	2	46	
Background Conditions	0	0	0	62	95	0	45	403	27	1	194	52	879	
Project Trips	0	0	0	3	0	0	0	14	0	0	1	0	18	
Existing + Project	0	0	0	61	89	0	43	390	26	1	191	50	851	
Background + Project	0	0	0	65	95	0	45	417	27	1	195	52	897	
Intersection Number:	3													
Traffic Node Number:	3540													
Intersection Name:	Fourth Street													
Peak Hour:	PM													Date of Analysis: 01/29/21
Count Date:	06/05/18													
Scenario:	The Mark													
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	84	1274	130	0	125	98	0	0	0	64	81	0	1856	
ATI	21	137	13	0	23	13	0	0	0	4	7	0	218	
Background Conditions	105	1411	143	0	148	111	0	0	0	68	88	0	2074	
Project Trips	0	5	0	0	0	4	0	0	0	10	0	0	19	
Existing + Project	84	1279	130	0	125	102	0	0	0	74	81	0	1875	
Background + Project	105	1416	143	0	148	115	0	0	0	78	88	0	2093	

The Mark LTA PM Conditions

Intersection Number:	4													
Traffic Node Number:	3545													
Intersection Name:	Fourth Street													
Peak Hour:	PM													Date of Analysis: 01/29/21
Count Date:	09/13/18													
Scenario:	The Mark													
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	44	1342	81	0	86	58	0	0	0	66	163	0	1840	
ATI	21	191	14	0	15	7	0	0	0	5	16	0	269	
Background Conditions	65	1533	95	0	101	65	0	0	0	71	179	0	2109	
<b>Project Trips</b>	2	9	1	0	1	0	0	0	0	0	1	0	14	
Existing + Project	46	1351	82	0	87	58	0	0	0	66	164	0	1854	
Background + Project	67	1542	96	0	102	65	0	0	0	71	180	0	2123	
Intersection Number:	5													
Traffic Node Number:	3770													
Intersection Name:	Second Street													
Peak Hour:	PM													Date of Analysis: 01/29/21
Count Date:	03/04/14													
Scenario:	The Mark													
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	74	391	71	0	218	84	0	0	0	159	277	0	1274	
ATI	4	24	2	0	35	11	0	0	0	2	9	0	87	
Background Conditions	78	415	73	0	253	95	0	0	0	161	286	0	1361	
<b>Project Trips</b>	0	2	0	0	4	0	0	0	0	11	0	0	17	
Existing + Project	74	393	71	0	222	84	0	0	0	170	277	0	1291	
Background + Project	78	417	73	0	257	95	0	0	0	172	286	0	1378	
*Existing Volumes include a 1%/year growth rate from 2014-2020.														
Intersection Number:	6													
Traffic Node Number:	3773													
Intersection Name:	Third Street													
Peak Hour:	PM													Date of Analysis: 01/29/21
Count Date:	02/25/14													
Scenario:	The Mark													
Movements														
Scenario:	North Approach			East Approach			South Approach			West Approach			Total	
	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT		
Existing Conditions	0	0	0	90	240	0	271	519	85	0	237	71	1513	
ATI	0	0	0	8	40	0	24	44	7	0	28	4	155	
Background Conditions	0	0	0	98	280	0	295	563	92	0	265	75	1668	
<b>Project Trips</b>	0	0	0	0	0	0	0	1	4	0	0	0	5	
Existing + Project	0	0	0	90	240	0	271	520	89	0	237	71	1518	
Background + Project	0	0	0	98	280	0	295	564	96	0	265	75	1673	
*Existing Volumes include a 1%/year growth rate from 2014-2020.														

## **Appendix C**

### **Traffix Output Sheets**



The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

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Intersection #3781 SAN SALVADOR/THIRD

\*\*\*\*\*

Cycle (sec): 80 Critical Vol./Cap.(X): 0.627  
Loss Time (sec): 6 Average Delay (sec/veh): 9.4  
Optimal Cycle: 34 Level Of Service: A

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	10	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	1	0	0	0	0	0	0	0	1

Volume Module: >> Count Date: 12 May 2015 << 7:45-8:45

Base Vol:	45	1586	77	0	0	0	60	63	0	0	76	114
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	45	1586	77	0	0	0	60	63	0	0	76	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	45	1586	77	0	0	0	60	63	0	0	76	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	45	1586	77	0	0	0	60	63	0	0	76	114
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	45	1586	77	0	0	0	60	63	0	0	76	114

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Lanes:	0.05	1.86	0.09	0.00	0.00	0.00	0.49	0.51	0.00	0.00	0.40	0.60
Final Sat.:	95	3343	162	0	0	0	878	922	0	0	720	1080

Capacity Analysis Module:

Vol/Sat:	0.47	0.47	0.47	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.11	0.11
Crit Moves:	****									****		
Green Time:	60.5	60.5	60.5	0.0	0.0	0.0	13.5	13.5	0.0	0.0	13.5	13.5
Volume/Cap:	0.63	0.63	0.63	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.63	0.63
Delay/Veh:	5.0	5.0	5.0	0.0	0.0	0.0	30.6	30.6	0.0	0.0	35.1	35.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	5.0	5.0	5.0	0.0	0.0	0.0	30.6	30.6	0.0	0.0	35.1	35.1
LOS by Move:	A	A	A	A	A	A	C	C	A	A	D	D
HCM2kAvgQ:	10	10	10	0	0	0	3	3	0	0	5	5

\*\*\*\*\*

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

\*\*\*\*\*

The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

\*\*\*\*\*

Intersection #3827 THIRD/WILLIAM

\*\*\*\*\*

Cycle (sec): 80 Critical Vol./Cap.(X): 0.460  
Loss Time (sec): 6 Average Delay (sec/veh): 7.7  
Optimal Cycle: 26 Level Of Service: A

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	10	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	1	0	0	1	0	0	0	1

Volume Module:	>> Count	Date:	5 Jun 2018	<< 8:00-9:00AM
Base Vol:	45 1227 41	0 0 0	25 49 0	0 90 57
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	45 1227 41	0 0 0	25 49 0	0 90 57
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	45 1227 41	0 0 0	25 49 0	0 90 57
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	45 1227 41	0 0 0	25 49 0	0 90 57
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Final Volume:	45 1227 41	0 0 0	25 49 0	0 90 57

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.97	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Lanes:	0.07	1.93	1.00	0.00	0.00	0.00	0.34	0.66	0.00	0.00	0.61	0.39
Final Sat.:	131	3569	1750	0	0	0	608	1192	0	0	1102	698

Capacity Analysis Module:	Vol/Sat:	0.34	0.34	0.02	0.00	0.00	0.00	0.04	0.04	0.00	0.00	0.08	0.08
Crit Moves:	****											****	
Green Time:	59.8	59.8	59.8	0.0	0.0	0.0	14.2	14.2	0.0	0.0	14.2	14.2	
Volume/Cap:	0.46	0.46	0.03	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.46	0.46	
Delay/Veh:	4.0	4.0	2.6	0.0	0.0	0.0	28.6	28.6	0.0	0.0	30.5	30.5	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:	4.0	4.0	2.6	0.0	0.0	0.0	28.6	28.6	0.0	0.0	30.5	30.5	
LOS by Move:	A	A	A	A	A	A	C	C	A	A	C	C	
HCM2kAvgQ:	6	6	0	0	0	0	2	2	0	0	3	3	

\*\*\*\*\*

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

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The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

\*\*\*\*\*

Intersection #3540 FOURTH/SAN SALVADOR

\*\*\*\*\*

Cycle (sec): 80 Critical Vol./Cap.(X): 0.203  
Loss Time (sec): 6 Average Delay (sec/veh): 12.1  
Optimal Cycle: 26 Level Of Service: B  
\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	0	0	1	0	1	0	0	0

Volume Module:	>> Count	Date:	5 Jun 2018	<< 8:00-9:00AM
Base Vol:	0	0	0	53 389 68
Growth Adj:	1.00	1.00	1.00	1.00 1.00 1.00
Initial Bse:	0	0	0	53 389 68
User Adj:	1.00	1.00	1.00	1.00 1.00 1.00
PHF Adj:	1.00	1.00	1.00	1.00 1.00 1.00
PHF Volume:	0	0	0	53 389 68
Reduct Vol:	0	0	0	0 0 0
Reduced Vol:	0	0	0	53 389 68
PCE Adj:	1.00	1.00	1.00	1.00 1.00 1.00
MLF Adj:	1.00	1.00	1.00	1.00 1.00 1.00
FinalVolume:	0	0	0	53 389 68

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.00	0.00	0.00	1.00	2.00	1.00	0.01	0.73	0.26	0.17	0.81	0.02
Final Sat.:	0	0	0	1750	3800	1750	15	1278	457	292	1423	35

Capacity Analysis Module:	Vol/Sat:	0.00	0.00	0.00	0.03	0.10	0.04	0.07	0.07	0.07	0.09	0.09	0.09
Crit Moves:					****						****		
Green Time:	0.0	0.0	0.0	40.3	40.3	40.3	33.7	33.7	33.7	33.7	33.7	33.7	33.7
Volume/Cap:	0.00	0.00	0.00	0.06	0.20	0.08	0.16	0.16	0.16	0.20	0.20	0.20	0.20
Delay/Veh:	0.0	0.0	0.0	10.2	11.0	10.3	14.4	14.4	14.4	14.8	14.8	14.8	14.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	10.2	11.0	10.3	14.4	14.4	14.4	14.8	14.8	14.8	14.8
LOS by Move:	A	A	A	B	B	B	B	B	B	B	B	B	B
HCM2kAvgQ:	0	0	0	1	3	1	2	2	2	3	3	3	3

\*\*\*\*\*

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

\*\*\*\*\*

The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

\*\*\*\*\*

Intersection #3545 FOURTH/WILLIAM

\*\*\*\*\*

Cycle (sec): 80 Critical Vol./Cap.(X): 0.223  
Loss Time (sec): 6 Average Delay (sec/veh): 12.5  
Optimal Cycle: 26 Level Of Service: B  
\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	1	0	0	1	0

Volume Module:	>> Count	Date:	13 Sep 2018	<< 7:00-8:00AM
Base Vol:	0	0	0	30 358 20
Growth Adj:	1.00	1.00	1.00	1.00 1.00 1.00
Initial Bse:	0	0	0	30 358 20
User Adj:	1.00	1.00	1.00	1.00 1.00 1.00
PHF Adj:	1.00	1.00	1.00	1.00 1.00 1.00
PHF Volume:	0	0	0	30 358 20
Reduct Vol:	0	0	0	0 0 0
Reduced Vol:	0	0	0	30 358 20
PCE Adj:	1.00	1.00	1.00	1.00 1.00 1.00
MLF Adj:	1.00	1.00	1.00	1.00 1.00 1.00
FinalVolume:	0	0	0	30 358 20

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.95	0.95	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.00	0.00	0.00	0.15	1.75	0.10	0.00	0.53	0.47	0.37	0.63	0.00
Final Sat.:	0	0	0	265	3159	176	0	953	847	657	1143	0

Capacity Analysis Module:	Vol/Sat:	0.00	0.00	0.00	0.11	0.11	0.11	0.00	0.06	0.06	0.09	0.09	0.00
Crit Moves:					****							****	
Green Time:	0.0	0.0	0.0	40.7	40.7	40.7	0.0	33.3	33.3	33.3	33.3	33.3	0.0
Volume/Cap:	0.00	0.00	0.00	0.22	0.22	0.22	0.00	0.14	0.14	0.22	0.22	0.22	0.00
Delay/Veh:	0.0	0.0	0.0	11.0	11.0	11.0	0.0	14.5	14.5	15.2	15.2	15.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	11.0	11.0	11.0	0.0	14.5	14.5	15.2	15.2	15.2	0.0
LOS by Move:	A	A	A	B	B	B	A	B	B	B	B	B	A
HCM2kAvgQ:	0	0	0	3	3	3	0	2	2	3	3	3	0

\*\*\*\*\*

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

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The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

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

\*\*\*\*\*

Intersection #3770 SAN FERNANDO/SECOND

\*\*\*\*\*

Cycle (sec): 80 Critical Vol./Cap.(X): 0.286  
Loss Time (sec): 6 Average Delay (sec/veh): 13.5  
Optimal Cycle: 26 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0
Y+R:	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	1	0	0	1	0

Volume Module: >> Count Date: 4 Mar 2014 << 8:00-9:00

Base Vol:	0	0	0	25	192	41	0	146	113	61	189	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	25	192	41	0	146	113	61	189	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	25	192	41	0	146	113	61	189	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	25	192	41	0	146	113	61	189	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	25	192	41	0	146	113	61	189	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	25	192	41	0	146	113	61	189	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.00	0.00	0.00	0.12	0.88	1.00	0.00	0.56	0.44	0.24	0.76	0.00
Final Sat.:	0	0	0	207	1593	1750	0	1015	785	439	1361	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.12	0.12	0.02	0.00	0.14	0.14	0.14	0.14	0.00
Crit Moves:				****			****					
Green Time:	0.0	0.0	0.0	33.7	33.7	33.7	0.0	40.3	40.3	40.3	40.3	0.0
Volume/Cap:	0.00	0.00	0.00	0.29	0.29	0.06	0.00	0.29	0.29	0.28	0.28	0.00
Delay/Veh:	0.0	0.0	0.0	16.2	16.2	13.8	0.0	12.3	12.3	12.2	12.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	16.2	16.2	13.8	0.0	12.3	12.3	12.2	12.2	0.0
LOS by Move:	A	A	A	B	B	B	A	B	B	B	B	A
HCM2kAvgQ:	0	0	0	4	4	1	0	4	4	4	4	0

\*\*\*\*\*

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



The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

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

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Intersection #3773 SAN FERNANDO/THIRD

\*\*\*\*\*

Cycle (sec): 80 Critical Vol./Cap.(X): 0.451  
Loss Time (sec): 6 Average Delay (sec/veh): 10.7  
Optimal Cycle: 26 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	10	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	1	1	0	1	0	0	0	1

Volume Module: >> Count Date: 25 Feb 2014 << 8:00-9:00

Base Vol:	88	1006	305	0	0	0	28	153	0	0	177	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	88	1006	305	0	0	0	28	153	0	0	177	42
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	88	1006	305	0	0	0	28	153	0	0	177	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	88	1006	305	0	0	0	28	153	0	0	177	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	1006	305	0	0	0	28	153	0	0	177	42
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	88	1006	305	0	0	0	28	153	0	0	177	42

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Lanes:	0.17	1.83	1.00	0.00	0.00	0.00	0.15	0.85	0.00	0.00	0.81	0.19
Final Sat.:	298	3402	1750	0	0	0	278	1522	0	0	1455	345

Capacity Analysis Module:

Vol/Sat:	0.30	0.30	0.17	0.00	0.00	0.00	0.10	0.10	0.00	0.00	0.12	0.12
Crit Moves:	****									****		
Green Time:	52.4	52.4	52.4	0.0	0.0	0.0	21.6	21.6	0.0	0.0	21.6	21.6
Volume/Cap:	0.45	0.45	0.27	0.00	0.00	0.00	0.37	0.37	0.00	0.00	0.45	0.45
Delay/Veh:	6.9	6.9	5.9	0.0	0.0	0.0	24.2	24.2	0.0	0.0	25.0	25.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	6.9	6.9	5.9	0.0	0.0	0.0	24.2	24.2	0.0	0.0	25.0	25.0
LOS by Move:	A	A	A	A	A	A	C	C	A	A	C	C
HCM2kAvgQ:	7	7	3	0	0	0	4	4	0	0	5	5

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

The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

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Intersection #3781 SAN SALVADOR/THIRD

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Cycle (sec): 55 Critical Vol./Cap.(X): 0.359  
Loss Time (sec): 6 Average Delay (sec/veh): 10.2  
Optimal Cycle: 26 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound			
Movement:	L	T	R	L	T	R	L	T	R	L	T	R	
Control:	Split Phase			Split Phase			Permitted			Permitted			
Rights:	Include			Include			Include			Include			
Min. Green:	10	10	10	0	0	0	10	10	0	0	10	10	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	0	1	0	1	0	0	0	0	0	0	0	1	0

Volume Module: >> Count Date: 12 May 2015 << 5:00-6:00

Base Vol:	38	433	33	0	0	0	58	112	0	0	181	143
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	433	33	0	0	0	58	112	0	0	181	143
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	433	33	0	0	0	58	112	0	0	181	143
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	433	33	0	0	0	58	112	0	0	181	143
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	38	433	33	0	0	0	58	112	0	0	181	143

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Lanes:	0.15	1.72	0.13	0.00	0.00	0.00	0.34	0.66	0.00	0.00	0.56	0.44
Final Sat.:	271	3093	236	0	0	0	614	1186	0	0	1006	794

Capacity Analysis Module:

Vol/Sat:	0.14	0.14	0.14	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.18	0.18
Crit Moves:	****									****		
Green Time:	21.4	21.4	21.4	0.0	0.0	0.0	27.6	27.6	0.0	0.0	27.6	27.6
Volume/Cap:	0.36	0.36	0.36	0.00	0.00	0.00	0.19	0.19	0.00	0.00	0.36	0.36
Delay/Veh:	12.1	12.1	12.1	0.0	0.0	0.0	7.7	7.7	0.0	0.0	8.6	8.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.1	12.1	12.1	0.0	0.0	0.0	7.7	7.7	0.0	0.0	8.6	8.6
LOS by Move:	B	B	B	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	3	3	3	0	0	0	2	2	0	0	3	3

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

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The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

\*\*\*\*\*

Intersection #3827 THIRD/WILLIAM

\*\*\*\*\*

Cycle (sec): 55 Critical Vol./Cap.(X): 0.277  
Loss Time (sec): 6 Average Delay (sec/veh): 9.8  
Optimal Cycle: 26 Level Of Service: A

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	10	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	1	1	0	0	1	0	0	1

Volume Module:	>> Count	Date:	5 Jun 2018	<< 5:00-6:00PM
Base Vol:	26 376 43	0 0 0	50 190 1	0 89 58
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	26 376 43	0 0 0	50 190 1	0 89 58
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	26 376 43	0 0 0	50 190 1	0 89 58
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	26 376 43	0 0 0	50 190 1	0 89 58
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Final Volume:	26 376 43	0 0 0	50 190 1	0 89 58

Saturation Flow Module:	
Sat/Lane:	1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900 1900
Adjustment:	0.95 0.98 0.92 0.92 1.00 0.92 0.92 0.92 0.92 0.92 0.95 0.95
Lanes:	0.13 1.87 1.00 0.00 0.00 0.00 0.20 0.79 0.01 0.00 0.61 0.39
Final Sat.:	239 3461 1750 0 0 0 363 1380 7 0 1090 710

Capacity Analysis Module:	
Vol/Sat:	0.11 0.11 0.02 0.00 0.00 0.00 0.14 0.14 0.14 0.00 0.08 0.08
Crit Moves:	****
Green Time:	21.6 21.6 21.6 0.0 0.0 0.0 27.4 27.4 27.4 0.0 27.4 27.4
Volume/Cap:	0.28 0.28 0.06 0.00 0.00 0.00 0.28 0.28 0.28 0.00 0.16 0.16
Delay/Veh:	11.5 11.5 10.4 0.0 0.0 0.0 8.2 8.2 8.2 0.0 7.6 7.6
User DelAdj:	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
AdjDel/Veh:	11.5 11.5 10.4 0.0 0.0 0.0 8.2 8.2 8.2 0.0 7.6 7.6
LOS by Move:	B B B A A A A A A A A A
HCM2kAvgQ:	2 2 0 0 0 0 3 3 3 0 1 1

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

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The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

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Intersection #3540 FOURTH/SAN SALVADOR

\*\*\*\*\*

Cycle (sec): 110 Critical Vol./Cap.(X): 0.486  
Loss Time (sec): 6 Average Delay (sec/veh): 13.1  
Optimal Cycle: 27 Level Of Service: B  
\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	0	0	1	0	0	1	0	0

Volume Module: >> Count Date: 5 Jun 2018 << 4:35-5:35PM

Base Vol:	0	0	0	130	1274	84	0	81	64	98	125	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	130	1274	84	0	81	64	98	125	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	130	1274	84	0	81	64	98	125	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	130	1274	84	0	81	64	98	125	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	130	1274	84	0	81	64	98	125	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.00	0.00	0.00	1.00	2.00	1.00	0.00	0.56	0.44	0.44	0.56	0.00
Final Sat.:	0	0	0	1750	3800	1750	0	1006	794	791	1009	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.07	0.34	0.05	0.00	0.08	0.08	0.12	0.12	0.00
Crit Moves:				****						****		
Green Time:	0.0	0.0	0.0	75.9	75.9	75.9	0.0	28.1	28.1	28.1	28.1	0.0
Volume/Cap:	0.00	0.00	0.00	0.11	0.49	0.07	0.00	0.32	0.32	0.49	0.49	0.00
Delay/Veh:	0.0	0.0	0.0	5.7	8.1	5.6	0.0	33.6	33.6	35.6	35.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	5.7	8.1	5.6	0.0	33.6	33.6	35.6	35.6	0.0
LOS by Move:	A	A	A	A	A	A	A	C	C	D	D	A
HCM2kAvgQ:	0	0	0	2	10	1	0	4	4	7	7	0

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

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The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

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Intersection #3545 FOURTH/WILLIAM

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.569  
Loss Time (sec): 6 Average Delay (sec/veh): 12.8  
Optimal Cycle: 31 Level Of Service: B  
\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	1	0	0	1	0

Volume Module:	>> Count	Date:	13 Sep 2018	<< 4:25-5:25PM
Base Vol:	0	0	0	81 1342 44
Growth Adj:	1.00	1.00	1.00	1.00 1.00 1.00
Initial Bse:	0	0	0	81 1342 44
User Adj:	1.00	1.00	1.00	1.00 1.00 1.00
PHF Adj:	1.00	1.00	1.00	1.00 1.00 1.00
PHF Volume:	0	0	0	81 1342 44
Reduct Vol:	0	0	0	0 0 0
Reduced Vol:	0	0	0	81 1342 44
PCE Adj:	1.00	1.00	1.00	1.00 1.00 1.00
MLF Adj:	1.00	1.00	1.00	1.00 1.00 1.00
FinalVolume:	0	0	0	81 1342 44

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.95	0.95	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.00	0.00	0.00	0.11	1.83	0.06	0.00	0.71	0.29	0.40	0.60	0.00
Final Sat.:	0	0	0	199	3293	108	0	1281	519	725	1075	0

Capacity Analysis Module:	Vol/Sat:	0.00	0.00	0.00	0.41	0.41	0.41	0.00	0.13	0.13	0.08	0.08	0.00
Crit Moves:							****		****				
Green Time:	0.0	0.0	0.0	71.6	71.6	71.6	0.0	22.4	22.4	22.4	22.4	0.0	
Volume/Cap:	0.00	0.00	0.00	0.57	0.57	0.57	0.00	0.57	0.57	0.36	0.36	0.00	
Delay/Veh:	0.0	0.0	0.0	7.1	7.1	7.1	0.0	36.5	36.5	33.3	33.3	0.0	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:	0.0	0.0	0.0	7.1	7.1	7.1	0.0	36.5	36.5	33.3	33.3	0.0	
LOS by Move:	A	A	A	A	A	A	A	D	D	C	C	A	
HCM2kAvgQ:	0	0	0	12	12	12	0	7	7	4	4	0	

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

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The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

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

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Intersection #3770 SAN FERNANDO/SECOND

\*\*\*\*\*

Cycle (sec): 80 Critical Vol./Cap.(X): 0.539  
Loss Time (sec): 6 Average Delay (sec/veh): 17.1  
Optimal Cycle: 29 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0
Y+R:	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	1	0	0	1	0

Volume Module: >> Count Date: 4 Mar 2014 << 5:00-6:00

Base Vol:	0	0	0	71	391	74	0	277	159	84	218	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	71	391	74	0	277	159	84	218	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	71	391	74	0	277	159	84	218	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	71	391	74	0	277	159	84	218	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	71	391	74	0	277	159	84	218	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	71	391	74	0	277	159	84	218	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.00	0.00	0.00	0.15	0.85	1.00	0.00	0.64	0.36	0.28	0.72	0.00
Final Sat.:	0	0	0	277	1523	1750	0	1144	656	501	1299	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.26	0.26	0.04	0.00	0.24	0.24	0.17	0.17	0.00
Crit Moves:				****				****				
Green Time:	0.0	0.0	0.0	38.1	38.1	38.1	0.0	35.9	35.9	35.9	35.9	0.0
Volume/Cap:	0.00	0.00	0.00	0.54	0.54	0.09	0.00	0.54	0.54	0.37	0.37	0.00
Delay/Veh:	0.0	0.0	0.0	17.2	17.2	11.7	0.0	18.6	18.6	15.9	15.9	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	17.2	17.2	11.7	0.0	18.6	18.6	15.9	15.9	0.0
LOS by Move:	A	A	A	B	B	B	A	B	B	B	B	A
HCM2kAvgQ:	0	0	0	9	9	1	0	9	9	5	5	0

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

The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

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

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Intersection #3773 SAN FERNANDO/THIRD

\*\*\*\*\*

Cycle (sec): 80 Critical Vol./Cap.(X): 0.375  
Loss Time (sec): 6 Average Delay (sec/veh): 14.3  
Optimal Cycle: 26 Level Of Service: B

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Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	10	10	0	0	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	1	0	0	1	0	0	0	1

Volume Module: >> Count Date: 25 Feb 2014 << 5:00-6:00

Base Vol:	85	519	271	0	0	0	71	237	0	0	240	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	85	519	271	0	0	0	71	237	0	0	240	90
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	519	271	0	0	0	71	237	0	0	240	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	85	519	271	0	0	0	71	237	0	0	240	90
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	519	271	0	0	0	71	237	0	0	240	90
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	519	271	0	0	0	71	237	0	0	240	90

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Lanes:	0.29	1.71	1.00	0.00	0.00	0.00	0.23	0.77	0.00	0.00	0.73	0.27
Final Sat.:	521	3179	1750	0	0	0	415	1385	0	0	1309	491

Capacity Analysis Module:

Vol/Sat:	0.16	0.16	0.15	0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.18	0.18
Crit Moves:	****									****		
Green Time:	34.9	34.9	34.9	0.0	0.0	0.0	39.1	39.1	0.0	0.0	39.1	39.1
Volume/Cap:	0.37	0.37	0.36	0.00	0.00	0.00	0.35	0.35	0.00	0.00	0.37	0.37
Delay/Veh:	15.4	15.4	15.4	0.0	0.0	0.0	12.8	12.8	0.0	0.0	13.0	13.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	15.4	15.4	15.4	0.0	0.0	0.0	12.8	12.8	0.0	0.0	13.0	13.0
LOS by Move:	B	B	B	A	A	A	B	B	A	A	B	B
HCM2kAvgQ:	5	5	5	0	0	0	5	5	0	0	5	5

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



The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

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Intersection #3781 SAN SALVADOR/THIRD

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Cycle (sec): 80 Critical Vol./Cap.(X): 0.666  
Loss Time (sec): 6 Average Delay (sec/veh): 9.8  
Optimal Cycle: 37 Level Of Service: A

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	10	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	1	0	0	0	0	0	0	0	1

Volume Module:	>> Count	Date:	12 May 2015	<< 7:45-8:45
Base Vol:	47 1688	82	0	0
Growth Adj:	1.00 1.00	1.00	1.00 1.00	1.00
Initial Bse:	47 1688	82	0	0
User Adj:	1.00 1.00	1.00	1.00 1.00	1.00
PHF Adj:	1.00 1.00	1.00	1.00 1.00	1.00
PHF Volume:	47 1688	82	0	0
Reduct Vol:	0	0	0	0
Reduced Vol:	47 1688	82	0	0
PCE Adj:	1.00 1.00	1.00	1.00 1.00	1.00
MLF Adj:	1.00 1.00	1.00	1.00 1.00	1.00
FinalVolume:	47 1688	82	0	0

Saturation Flow Module:	Sat/Lane:	1900 1900	1900	1900 1900	1900	1900 1900	1900	1900 1900	1900	1900 1900	1900
Adjustment:	0.95 0.95	0.95	0.92 1.00	0.92	0.95 0.95	0.92	0.92 0.95	0.92	0.92 0.95	0.95	
Lanes:	0.05 1.86	0.09	0.00 0.00	0.00	0.48 0.52	0.00	0.00 0.40	0.60	0.00 0.40	0.60	
Final Sat.:	93 3344	162	0	0	871 929	0	0	720	1080		

Capacity Analysis Module:	Vol/Sat:	0.50 0.50	0.50	0.00 0.00	0.00	0.07 0.07	0.00	0.00 0.11	0.11
Crit Moves:		****						****	
Green Time:	60.6 60.6	60.6	0.0 0.0	0.0	13.4 13.4	0.0	0.0 13.4	13.4	
Volume/Cap:	0.67 0.67	0.67	0.00 0.00	0.00	0.42 0.42	0.00	0.00 0.67	0.67	
Delay/Veh:	5.4 5.4	5.4	0.0 0.0	0.0	30.8 30.8	0.0	0.0 36.8	36.8	
User DelAdj:	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00	
AdjDel/Veh:	5.4 5.4	5.4	0.0 0.0	0.0	30.8 30.8	0.0	0.0 36.8	36.8	
LOS by Move:	A A	A	A A	A	C C	A	A D	D	
HCM2kAvgQ:	12 12	12	0 0	0	3 3	0	0 5	5	

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

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The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

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

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Intersection #3827 THIRD/WILLIAM

\*\*\*\*\*

Cycle (sec): 80 Critical Vol./Cap.(X): 0.513  
Loss Time (sec): 6 Average Delay (sec/veh): 7.9  
Optimal Cycle: 27 Level Of Service: A

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	10	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	1	0	0	1	0	0	0	1

Volume Module:	>> Count	Date:	5 Jun 2018	<< 8:00-9:00AM
Base Vol:	50 1374 44	0 0 0	27 50 0	0 98 64
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	50 1374 44	0 0 0	27 50 0	0 98 64
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Volume:	50 1374 44	0 0 0	27 50 0	0 98 64
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Reduced Vol:	50 1374 44	0 0 0	27 50 0	0 98 64
PCE Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
MLF Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
FinalVolume:	50 1374 44	0 0 0	27 50 0	0 98 64

Saturation Flow Module:	Sat/Lane:	1900 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900
Adjustment:	0.95 0.97 0.92	0.92 1.00 0.92	0.95 0.95 0.92	0.92 0.95 0.95	
Lanes:	0.07 1.93 1.00	0.00 0.00 0.00	0.35 0.65 0.00	0.00 0.60 0.40	
Final Sat.:	130 3570 1750	0 0 0	631 1169 0	0 1089 711	

Capacity Analysis Module:	Vol/Sat:	0.38 0.38 0.03	0.00 0.00 0.00	0.04 0.04 0.00	0.00 0.09 0.09
Crit Moves:	****				****
Green Time:	60.0 60.0 60.0	0.0 0.0 0.0	14.0 14.0 0.0	0.0 14.0 14.0	
Volume/Cap:	0.51 0.51 0.03	0.00 0.00 0.00	0.24 0.24 0.00	0.00 0.51 0.51	
Delay/Veh:	4.2 4.2 2.6	0.0 0.0 0.0	28.8 28.8 0.0	0.0 31.3 31.3	
User DelAdj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	
AdjDel/Veh:	4.2 4.2 2.6	0.0 0.0 0.0	28.8 28.8 0.0	0.0 31.3 31.3	
LOS by Move:	A A A	A A A	C C A	A C C	
HCM2kAvgQ:	7 7 0	0 0 0	2 2 0	0 4 4	

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

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The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

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Intersection #3540 FOURTH/SAN SALVADOR

\*\*\*\*\*

Cycle (sec): 80 Critical Vol./Cap.(X): 0.205  
Loss Time (sec): 6 Average Delay (sec/veh): 12.2  
Optimal Cycle: 26 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	0	0	1	0	1	0	0	0

Volume Module:	>> Count	Date:	5 Jun 2018	<< 8:00-9:00AM
Base Vol:	0	0	0	53 389 68
Growth Adj:	1.00	1.00	1.00	1.00 1.00 1.00
Initial Bse:	0	0	0	53 389 68
User Adj:	1.00	1.00	1.00	1.00 1.00 1.00
PHF Adj:	1.00	1.00	1.00	1.00 1.00 1.00
PHF Volume:	0	0	0	53 389 68
Reduct Vol:	0	0	0	0 0 0
Reduced Vol:	0	0	0	53 389 68
PCE Adj:	1.00	1.00	1.00	1.00 1.00 1.00
MLF Adj:	1.00	1.00	1.00	1.00 1.00 1.00
FinalVolume:	0	0	0	53 389 68

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Lanes:	0.00	0.00	0.00	1.00	2.00	1.00	0.01	0.73	0.26	0.16	0.82	0.02
Final Sat.:	0	0	0	1750	3800	1750	15	1278	457	288	1428	35

Capacity Analysis Module:	Vol/Sat:	0.00	0.00	0.00	0.03	0.10	0.04	0.07	0.07	0.07	0.09	0.09	0.09
Crit Moves:					****						****		
Green Time:	0.0	0.0	0.0	40.0	40.0	40.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
Volume/Cap:	0.00	0.00	0.00	0.06	0.20	0.08	0.15	0.15	0.15	0.20	0.20	0.20	0.20
Delay/Veh:	0.0	0.0	0.0	10.3	11.2	10.4	14.3	14.3	14.3	14.6	14.6	14.6	14.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	10.3	11.2	10.4	14.3	14.3	14.3	14.6	14.6	14.6	14.6
LOS by Move:	A	A	A	B	B	B	B	B	B	B	B	B	B
HCM2kAvgQ:	0	0	0	1	3	1	2	2	2	3	3	3	3

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

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The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

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

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Intersection #3545 FOURTH/WILLIAM  
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Cycle (sec): 80 Critical Vol./Cap.(X): 0.223  
Loss Time (sec): 6 Average Delay (sec/veh): 12.5  
Optimal Cycle: 26 Level Of Service: B  
\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	1	0	0	1	0

Volume Module: >> Count Date: 13 Sep 2018 << 7:00-8:00AM

Base Vol:	0	0	0	30	358	20	0	54	48	61	106	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	30	358	20	0	54	48	61	106	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	30	358	20	0	54	48	61	106	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	30	358	20	0	54	48	61	106	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	30	358	20	0	54	48	61	106	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.95	0.95	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.00	0.00	0.00	0.15	1.75	0.10	0.00	0.53	0.47	0.37	0.63	0.00
Final Sat.:	0	0	0	265	3159	176	0	953	847	657	1143	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.11	0.11	0.11	0.00	0.06	0.06	0.09	0.09	0.00
Crit Moves:				****							****	
Green Time:	0.0	0.0	0.0	40.7	40.7	40.7	0.0	33.3	33.3	33.3	33.3	0.0
Volume/Cap:	0.00	0.00	0.00	0.22	0.22	0.22	0.00	0.14	0.14	0.22	0.22	0.00
Delay/Veh:	0.0	0.0	0.0	11.0	11.0	11.0	0.0	14.5	14.5	15.2	15.2	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	11.0	11.0	11.0	0.0	14.5	14.5	15.2	15.2	0.0
LOS by Move:	A	A	A	B	B	B	A	B	B	B	B	A
HCM2kAvgQ:	0	0	0	3	3	3	0	2	2	3	3	0

\*\*\*\*\*  
Note: Queue reported is the number of cars per lane.  
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The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

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

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Intersection #3770 SAN FERNANDO/SECOND

\*\*\*\*\*

Cycle (sec): 80 Critical Vol./Cap.(X): 0.305  
Loss Time (sec): 6 Average Delay (sec/veh): 13.2  
Optimal Cycle: 26 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	10	10	7	10	10	10	10	10
Y+R:	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	1	0	0	1	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	0	0	25	193	41	0	168	122	61	192	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	25	193	41	0	168	122	61	192	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	25	193	41	0	168	122	61	192	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	25	193	41	0	168	122	61	192	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	25	193	41	0	168	122	61	192	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	25	193	41	0	168	122	61	192	0

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.00	0.00	0.00	0.11	0.89	1.00	0.00	0.58	0.42	0.24	0.76	0.00
Final Sat.:	0	0	0	206	1594	1750	0	1043	757	434	1366	0

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.00	0.00	0.12	0.12	0.02	0.00	0.16	0.16	0.14	0.14	0.00
Crit Moves:				****			****					
Green Time:	0.0	0.0	0.0	31.8	31.8	31.8	0.0	42.2	42.2	42.2	42.2	0.0
Volume/Cap:	0.00	0.00	0.00	0.31	0.31	0.06	0.00	0.31	0.31	0.27	0.27	0.00
Delay/Veh:	0.0	0.0	0.0	17.7	17.7	15.1	0.0	11.4	11.4	11.1	11.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	17.7	17.7	15.1	0.0	11.4	11.4	11.1	11.1	0.0
LOS by Move:	A	A	A	B	B	B	A	B	B	B	B	A
HCM2kAvgQ:	0	0	0	4	4	1	0	4	4	4	4	0

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

The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

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

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Intersection #3773 SAN FERNANDO/THIRD

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Cycle (sec): 80 Critical Vol./Cap.(X): 0.492  
Loss Time (sec): 6 Average Delay (sec/veh): 11.6  
Optimal Cycle: 26 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	0	0	0	1	0	0	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	99	1121	322	0	0	0	32	167	0	0	182	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	1121	322	0	0	0	32	167	0	0	182	43
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	99	1121	322	0	0	0	32	167	0	0	182	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	99	1121	322	0	0	0	32	167	0	0	182	43
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	1121	322	0	0	0	32	167	0	0	182	43
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	99	1121	322	0	0	0	32	167	0	0	182	43

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Lanes:	0.17	1.83	1.00	0.00	0.00	0.00	0.16	0.84	0.00	0.00	0.81	0.19
Final Sat.:	300	3400	1750	0	0	0	289	1511	0	0	1456	344

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.33	0.33	0.18	0.00	0.00	0.00	0.11	0.11	0.00	0.00	0.13	0.13
Crit Moves:	****									****		
Green Time:	53.7	53.7	53.7	0.0	0.0	0.0	20.3	20.3	0.0	0.0	20.3	20.3
Volume/Cap:	0.49	0.49	0.27	0.00	0.00	0.00	0.43	0.43	0.00	0.00	0.49	0.49
Delay/Veh:	7.2	7.2	5.9	0.0	0.0	0.0	28.0	28.0	0.0	0.0	29.2	29.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.2	7.2	5.9	0.0	0.0	0.0	28.0	28.0	0.0	0.0	29.2	29.2
LOS by Move:	A	A	A	A	A	A	C	C	A	A	C	C
HCM2kAvgQ:	8	8	4	0	0	0	4	4	0	0	5	5

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

The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

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

\*\*\*\*\*  
Intersection #3781 SAN SALVADOR/THIRD  
\*\*\*\*\*

Cycle (sec): 55 Critical Vol./Cap.(X): 0.363  
Loss Time (sec): 6 Average Delay (sec/veh): 10.2  
Optimal Cycle: 26 Level Of Service: B  
\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	10	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	0	1	0	0	0	1	0	0	0	1

Volume Module: >> Count Date: 12 May 2015 << 5:00-6:00

Base Vol:	38	440	33	0	0	0	58	112	0	0	182	144
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	38	440	33	0	0	0	58	112	0	0	182	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	38	440	33	0	0	0	58	112	0	0	182	144
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	38	440	33	0	0	0	58	112	0	0	182	144
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Volume:	38	440	33	0	0	0	58	112	0	0	182	144

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Lanes:	0.15	1.72	0.13	0.00	0.00	0.00	0.34	0.66	0.00	0.00	0.56	0.44
Final Sat.:	268	3100	232	0	0	0	614	1186	0	0	1005	795

Capacity Analysis Module:

Vol/Sat:	0.14	0.14	0.14	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.18	0.18
Crit Moves:	****						****					
Green Time:	21.5	21.5	21.5	0.0	0.0	0.0	27.5	27.5	0.0	0.0	27.5	27.5
Volume/Cap:	0.36	0.36	0.36	0.00	0.00	0.00	0.19	0.19	0.00	0.00	0.36	0.36
Delay/Veh:	12.0	12.0	12.0	0.0	0.0	0.0	7.7	7.7	0.0	0.0	8.7	8.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.0	12.0	12.0	0.0	0.0	0.0	7.7	7.7	0.0	0.0	8.7	8.7
LOS by Move:	B	B	B	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	3	3	3	0	0	0	2	2	0	0	3	3

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



The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

\*\*\*\*\*  
Intersection #3827 THIRD/WILLIAM  
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Cycle (sec): 55 Critical Vol./Cap.(X): 0.289  
Loss Time (sec): 6 Average Delay (sec/veh): 9.8  
Optimal Cycle: 26 Level Of Service: A  
\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	10	10	0	0	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	1	1	0	0	1	0	0	1

Volume Module: >> Count Date: 5 Jun 2018 << 5:00-6:00PM

Base Vol:	27	403	45	0	0	0	52	194	1	0	95	62
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	27	403	45	0	0	0	52	194	1	0	95	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	27	403	45	0	0	0	52	194	1	0	95	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	27	403	45	0	0	0	52	194	1	0	95	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	27	403	45	0	0	0	52	194	1	0	95	62

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.92	0.92	1.00	0.92	0.92	0.92	0.92	0.92	0.95	0.95
Lanes:	0.13	1.87	1.00	0.00	0.00	0.00	0.21	0.78	0.01	0.00	0.61	0.39
Final Sat.:	232	3467	1750	0	0	0	368	1374	7	0	1089	711

Capacity Analysis Module:

Vol/Sat:	0.12	0.12	0.03	0.00	0.00	0.00	0.14	0.14	0.14	0.00	0.09	0.09
Crit Moves:	****						****					
Green Time:	22.1	22.1	22.1	0.0	0.0	0.0	26.9	26.9	26.9	0.0	26.9	26.9
Volume/Cap:	0.29	0.29	0.06	0.00	0.00	0.00	0.29	0.29	0.29	0.00	0.18	0.18
Delay/Veh:	11.2	11.2	10.1	0.0	0.0	0.0	8.6	8.6	8.6	0.0	8.0	8.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.2	11.2	10.1	0.0	0.0	0.0	8.6	8.6	8.6	0.0	8.0	8.0
LOS by Move:	B	B	B	A	A	A	A	A	A	A	A	A
HCM2kAvgQ:	2	2	0	0	0	0	3	3	3	0	2	2

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

The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

\*\*\*\*\*

Intersection #3540 FOURTH/SAN SALVADOR

\*\*\*\*\*

Cycle (sec): 110 Critical Vol./Cap.(X): 0.545  
Loss Time (sec): 6 Average Delay (sec/veh): 13.9  
Optimal Cycle: 30 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	0	0	1	0	0	1	0	0

Volume Module: >> Count Date: 5 Jun 2018 << 4:35-5:35PM

Base Vol:	0	0	0	143	1411	105	0	88	68	111	148	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	143	1411	105	0	88	68	111	148	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	143	1411	105	0	88	68	111	148	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	143	1411	105	0	88	68	111	148	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	143	1411	105	0	88	68	111	148	0

Saturation Flow Module:

Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.00	0.00	0.00	1.00	2.00	1.00	0.00	0.56	0.44	0.43	0.57	0.00
Final Sat.:	0	0	0	1750	3800	1750	0	1015	785	771	1029	0

Capacity Analysis Module:

Vol/Sat:	0.00	0.00	0.00	0.08	0.37	0.06	0.00	0.09	0.09	0.14	0.14	0.00
Crit Moves:				****						****		
Green Time:	0.0	0.0	0.0	75.0	75.0	75.0	0.0	29.0	29.0	29.0	29.0	0.0
Volume/Cap:	0.00	0.00	0.00	0.12	0.54	0.09	0.00	0.33	0.33	0.54	0.54	0.00
Delay/Veh:	0.0	0.0	0.0	6.1	9.1	6.0	0.0	33.0	33.0	36.1	36.1	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	6.1	9.1	6.0	0.0	33.0	33.0	36.1	36.1	0.0
LOS by Move:	A	A	A	A	A	A	A	C	C	D	D	A
HCM2kAvgQ:	0	0	0	2	12	1	0	4	4	8	8	0

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

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The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

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

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Intersection #3545 FOURTH/WILLIAM

\*\*\*\*\*

Cycle (sec): 100 Critical Vol./Cap.(X): 0.648  
Loss Time (sec): 6 Average Delay (sec/veh): 13.6  
Optimal Cycle: 37 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	10	10	0	10	10	10	10	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	1	0	0	1	0

Volume Module:	>> Count	Date:	13 Sep 2018	<< 4:25-5:25PM
Base Vol:	0	0	0	95 1533 65
Growth Adj:	1.00	1.00	1.00	1.00 1.00 1.00
Initial Bse:	0	0	0	95 1533 65
User Adj:	1.00	1.00	1.00	1.00 1.00 1.00
PHF Adj:	1.00	1.00	1.00	1.00 1.00 1.00
PHF Volume:	0	0	0	95 1533 65
Reduct Vol:	0	0	0	0 0 0
Reduced Vol:	0	0	0	95 1533 65
PCE Adj:	1.00	1.00	1.00	1.00 1.00 1.00
MLF Adj:	1.00	1.00	1.00	1.00 1.00 1.00
FinalVolume:	0	0	0	95 1533 65

Saturation Flow Module:	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.95	0.95	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.00	0.00	0.00	0.11	1.81	0.08	0.00	0.72	0.28	0.39	0.61	0.00
Final Sat.:	0	0	0	202	3260	138	0	1289	511	705	1095	0

Capacity Analysis Module:	Vol/Sat:	0.00	0.00	0.00	0.47	0.47	0.47	0.00	0.14	0.14	0.09	0.09	0.00
Crit Moves:							****		****				
Green Time:	0.0	0.0	0.0	72.6	72.6	72.6	0.0	21.4	21.4	21.4	21.4	0.0	
Volume/Cap:	0.00	0.00	0.00	0.65	0.65	0.65	0.00	0.65	0.65	0.43	0.43	0.00	
Delay/Veh:	0.0	0.0	0.0	7.7	7.7	7.7	0.0	39.7	39.7	34.8	34.8	0.0	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:	0.0	0.0	0.0	7.7	7.7	7.7	0.0	39.7	39.7	34.8	34.8	0.0	
LOS by Move:	A	A	A	A	A	A	A	D	D	C	C	A	
HCM2kAvgQ:	0	0	0	15	15	15	0	7	7	5	5	0	

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

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The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

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

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Intersection #3770 SAN FERNANDO/SECOND

\*\*\*\*\*

Cycle (sec): 80 Critical Vol./Cap.(X): 0.611  
Loss Time (sec): 12 Average Delay (sec/veh): 20.5  
Optimal Cycle: 47 Level Of Service: C

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	10	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0	0	0	1	0	0	1	0	0	1	0

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	0	0	0	73	415	78	0	286	161	95	253	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	73	415	78	0	286	161	95	253	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	73	415	78	0	286	161	95	253	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	73	415	78	0	286	161	95	253	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	73	415	78	0	286	161	95	253	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	73	415	78	0	286	161	95	253	0

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95	0.95	0.95	0.92
Lanes:	0.00	0.00	0.00	0.15	0.85	1.00	0.00	0.64	0.36	0.27	0.73	0.00
Final Sat.:	0	0	0	269	1531	1750	0	1152	648	491	1309	0

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.00	0.00	0.00	0.27	0.27	0.04	0.00	0.25	0.25	0.19	0.19	0.00
Crit Moves:				****			****					
Green Time:	0.0	0.0	0.0	35.5	35.5	35.5	0.0	32.5	32.5	32.5	32.5	0.0
Volume/Cap:	0.00	0.00	0.00	0.61	0.61	0.10	0.00	0.61	0.61	0.48	0.48	0.00
Delay/Veh:	0.0	0.0	0.0	20.5	20.5	13.2	0.0	22.5	22.5	19.7	19.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	20.5	20.5	13.2	0.0	22.5	22.5	19.7	19.7	0.0
LOS by Move:	A	A	A	C	C	B	A	C	C	B	B	A
HCM2kAvgQ:	0	0	0	10	10	1	0	10	10	7	7	0

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

The Mark Residential Tower  
San Jose  
Hexagon Transportation Consultants, Inc.

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

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Intersection #3773 SAN FERNANDO/THIRD

\*\*\*\*\*

Cycle (sec): 80 Critical Vol./Cap.(X): 0.455  
Loss Time (sec): 12 Average Delay (sec/veh): 18.0  
Optimal Cycle: 37 Level Of Service: B

\*\*\*\*\*

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	10	10	10	0	0	0	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1	1	0	0	0	0	1	0	0	0	1

Volume Module:	North Bound			South Bound			East Bound			West Bound		
Base Vol:	92	563	295	0	0	0	75	265	0	0	280	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	92	563	295	0	0	0	75	265	0	0	280	98
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	92	563	295	0	0	0	75	265	0	0	280	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	92	563	295	0	0	0	75	265	0	0	280	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	563	295	0	0	0	75	265	0	0	280	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	563	295	0	0	0	75	265	0	0	280	98

Saturation Flow Module:	North Bound			South Bound			East Bound			West Bound		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.98	0.92	0.92	1.00	0.92	0.95	0.95	0.92	0.92	0.95	0.95
Lanes:	0.29	1.71	1.00	0.00	0.00	0.00	0.22	0.78	0.00	0.00	0.74	0.26
Final Sat.:	520	3180	1750	0	0	0	397	1403	0	0	1333	467

Capacity Analysis Module:	North Bound			South Bound			East Bound			West Bound		
Vol/Sat:	0.18	0.18	0.17	0.00	0.00	0.00	0.19	0.19	0.00	0.00	0.21	0.21
Crit Moves:	****									****		
Green Time:	31.1	31.1	31.1	0.0	0.0	0.0	36.9	36.9	0.0	0.0	36.9	36.9
Volume/Cap:	0.46	0.46	0.43	0.00	0.00	0.00	0.41	0.41	0.00	0.00	0.46	0.46
Delay/Veh:	19.2	19.2	20.0	0.0	0.0	0.0	15.8	15.8	0.0	0.0	16.5	16.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	19.2	19.2	20.0	0.0	0.0	0.0	15.8	15.8	0.0	0.0	16.5	16.5
LOS by Move:	B	B	B	A	A	A	B	B	A	A	B	B
HCM2kAvgQ:	6	6	6	0	0	0	6	6	0	0	7	7

\*\*\*\*\*

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



# HEXAGON TRANSPORTATION CONSULTANTS, INC.



## The Mark Residential Tower

Draft Transportation Demand Management (TDM) Plan

Prepared for:

**Urban Catalyst**

October 28, 2020



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# 1.

## Introduction

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Transportation Demand Management (TDM) is a combination of services, incentives, facilities, and actions that reduce single-occupant vehicle (SOV) trips to help relieve traffic congestion, parking demand, and air pollution problems. The purpose of TDM is to (1) reduce the amount of trips generated by new development; (2) promote more efficient utilization of existing transportation facilities and ensure that new developments are designed to maximize the potential for sustainable transportation usage; (3) reduce the parking demand generated by new development and allow for a reduction in parking supply; and (4) establish an ongoing monitoring and enforcement program to guarantee the desired trip and parking reductions are achieved.

This TDM Plan has been prepared for the proposed residential tower development at 459-475 Fourth Street in San Jose, California, to propose effective and appropriate TDM measures based on the project's size, location and land use. The main purpose of the TDM plan is to satisfy the parking reduction requirements outlined in Section 20.90.220 and Section 20.70.330 of the San Jose Code of Ordinances, and to qualify for a reduction in required off-street parking. However, the project as currently proposed will provide parking (through a combination of on-site and off-site parking) that meets or exceeds the City's parking requirements. Thus, this TDM plan is not required per the City's Code and has been prepared at the request of the project applicant.

This TDM Plan addresses all the requirements of the City's ordinance and includes TDM measures designed to reduce the proposed project's parking demand. The TDM plan includes maintaining an online kiosk of trip-planning resources, providing 100 percent unbundled parking for all residential spaces, and providing adequate on-site bicycle storage.

## Project Description

The proposed project is located at 459-475 Fourth Street and is located within the Downtown Growth Area Boundary. The project site location and the surrounding study area are shown on Figure 1. The project site plan is shown on Figure 2.

The project site is currently occupied by a single-family home and an apartment building. The project, as proposed, consists of 240 residential units, marketed towards student housing. The project proposes 20 to 95 on-site parking spaces accessible from the ground level of the building. Access to the project site is proposed via a single right-in/right-out driveway along the project's southern boundary on Fourth Street.

The City will allow the project to provide the remaining required parking spaces at an off-site location to meet its off-street parking requirement per the City code. The project applicant currently controls the existing underground parking garage (Garage 88) located beneath the building on the south side of San Fernando Street between S. Second Street and S. Third Street. Based on the amount of parking provided on-site, the project applicant will establish a shared parking agreement for the use of up to 172 spaces within Garage 88 to meet the City's parking requirements for the project.

### **Downtown Location and Proximity to Transit**

The location of a project within or adjacent to a central business district promotes pedestrian and bicycle travel in a high-density area of complementary land uses. The project site is located in the downtown core and is a short walk or bicycle ride from numerous complementary land uses and transit services. The project location effectively renders it part of a large-scale mixed-use development in a pedestrian- and bike-friendly environment with a significant share of trips internal to the downtown area. Additionally, the proposed project will be used primarily for student housing, with San Jose State University approximately 600 feet to the north. The project site is located approximately ½ -mile from the San Fernando Light Rail Stations (at First Street and Second Street). The San Jose Diridon station, approximately 1.5 mile away is served by the Green LRT line and serves as a transfer point to Caltrain, ACE, and Amtrak services.

### **Parking Requirement**

Based on the City's standard parking requirements, the project is required to provide a total of 240 off-street parking spaces. However, since the proposed project is located within the Downtown Growth Boundary and will meet the City Bicycle Parking requirements per Table 20-90, the project will conform to Subsections 20.90.220.A.1 Subsections a and b and would be granted a vehicle parking reduction of 20 percent. The project's required off-street parking would then be reduced to 192 parking spaces.

The proposed TDM Plan includes the following measures:

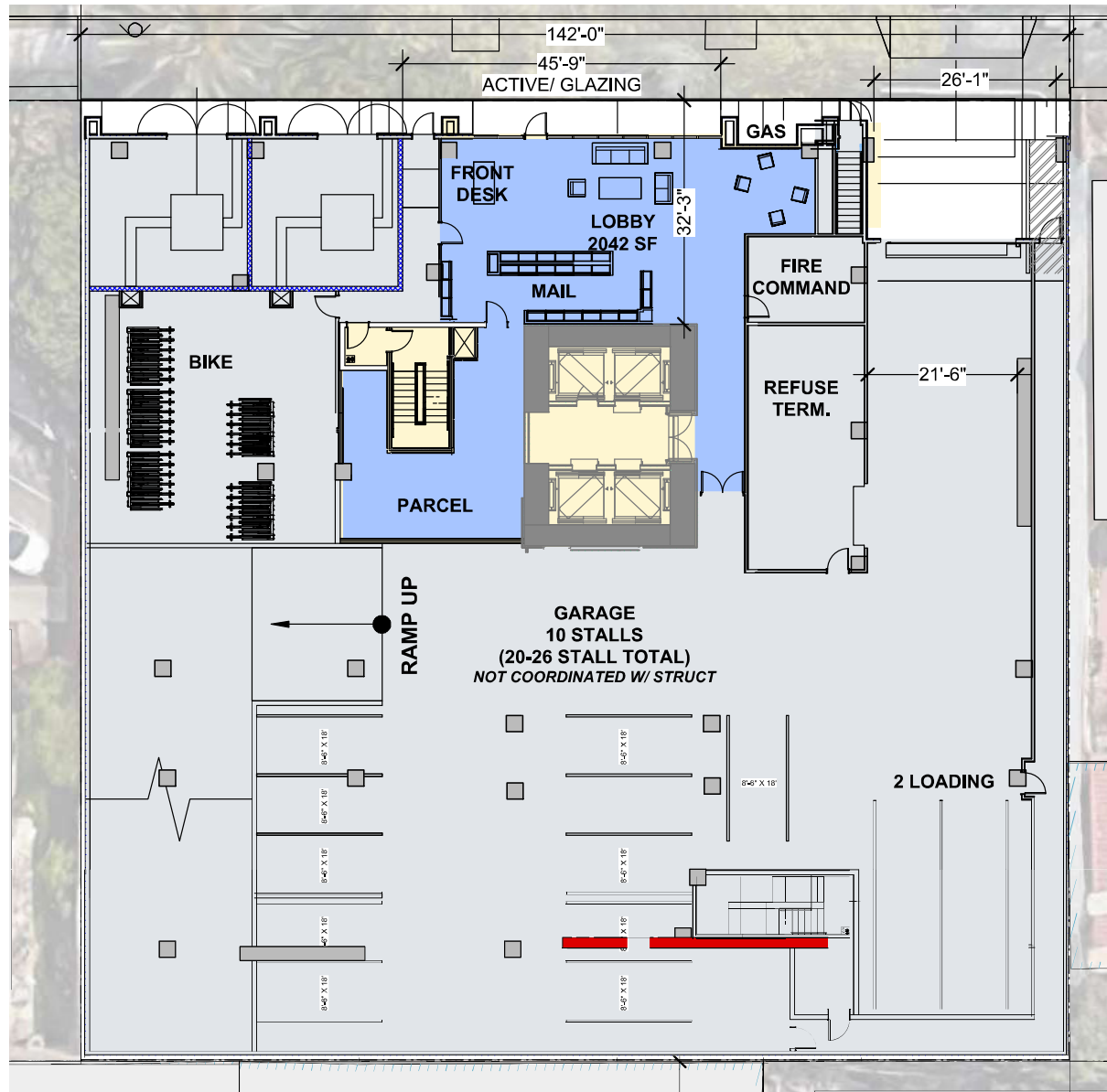
1. Public Information Elements (20.90.220.A.1.d.vii)
2. Unbundled Parking (20.90.220.A.1.d.xiv)

### **Report Organization**

The remainder of this report is divided into two chapters. Chapter 2 describes the transportation facilities and services in the vicinity of the project site. Chapter 3 describes the TDM measures that would be implemented for the proposed project, including the program for implementing and monitoring the TDM plan.



**Figure 1**  
**Site Location**



## Figure 2 Site Plan

## 2.

# Existing Transportation Facilities

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This chapter describes the existing conditions for all of the major transportation facilities in the vicinity of the project site, including the roadway network, existing and future transit service, and bicycle and pedestrian facilities.

### Existing Roadway Network

#### Existing Roadway Network

Regional access to the project site is provided by the Interstate 280/680 freeway and State Route 87. Local site access is provided by Third Street, Fourth Street, Fifth Street, San Salvador Street, William Street, Reed Street, Santa Clara Street, and Virginia Street. The freeways and local roadways are described below.

**Interstate 280** connects from US-101 in San Jose to I-80 in San Francisco. It is generally an eight-lane freeway in the vicinity of downtown San Jose. It also has auxiliary lanes between some interchanges. The section of I-280 just north of the Bascom Avenue overcrossing has six mixed-flow lanes and two high-occupancy-vehicle (HOV) lanes. Connections from I-280 to the project site are provided via partial interchanges at Fourth Street (ramps to the west only), Sixth Street (ramps from the west), and Seventh Street (ramps from the east). I-280/I-680 provides access to SR 87 and US-101.

**State Route 87** is primarily a six-lane freeway (four mixed-flow lanes and two HOV lanes) that is aligned in a north-south orientation within the project vicinity. SR 87 begins at its interchange with SR 85 and extends northward, terminating at its junction with US 101. Connections from SR-87 to the project site are provided via partial interchanges at Auzerais Avenue (ramps to and from the south) and Park Avenue (ramps to and from the north). SR 87 provides access to I-280/I-680 and US-101.

**Third Street** is a two-lane northbound arterial that runs west of the project site and extends from Humboldt Street from the south, to Mission Street in the north. There is on-street parking on both sides of Third Street in the project vicinity. There is a Class IV bikeway that runs along the east side of Third Street between Humboldt Street and St. James Street. From Third Street, the project site can be accessed via San Salvador Street and Fourth Street.

**Fourth Street** is a two-lane southbound arterial that runs along the project frontage and extends from Technology Place at its northern terminus, to Reed Street, where it terminates at the on-ramp to I-280 northbound. On-street parking is permitted on both sides of Fourth Street in the project vicinity. A Class IV bikeway runs along the westside of Fourth Street between St. James Street and Reed Street. Fourth Street will provide direct access to the project site via a single right-turn only driveway.

**Fifth Street** is a north-south two-lane street that extends from Margaret Street from the south, to San Salvador Street in the north. From Fifth Street, the project site can be accessed via San Salvador Street and Fourth Street.

**San Salvador Street** is an east-west two-lane street that extends from Market Street from the west, to 16<sup>th</sup> Street in the east. On-street parking is permitted on only the south side of San Salvador Street between Market Street and 10<sup>th</sup> Street. Class II bike lanes are provided along San Salvador Street between Market Street and 10<sup>th</sup> Street. San Salvador Street is a designated Class III bikeway (Bike Route) and provides “sharrow” or shared lane markings west of 10<sup>th</sup> Street. From San Salvador Street, the project site can be accessed via Fourth Street.

**William Street** is an east-west two-lane street that extends from Market Street in the west, to 24<sup>th</sup> Street in the east, where it becomes William Court. On-street parking is permitted on both sides of San Salvador Street. William Street is a designated Class III bikeway (Bike Route) and provides “sharrow” or shared lane markings along its entire extent. From William Street, the project site can be accessed via Third Street, San Salvador Street, and Fourth Street.

**Reed Street** is an east-west three-lane street, with two westbound lanes and one eastbound lane. Reed Street extends from Market Street in the west to 14<sup>th</sup> Street in the east. Reed Street provides access to the project site via Third Street, San Salvador Street, and Fourth Street.

## Existing Bicycle and Pedestrian Facilities

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

Note that the City’s General Plan identifies both walk and bicycle commute mode split targets as 15 percent or more for the year 2040. This level of pedestrian and bicycle mode share is a reasonable goal for the project, particularly if Caltrain, LRT, and bus services (including BRT) are utilized in combination with bicycle commuting.

### Existing Bicycle Facilities

Class IV (protected/buffered bike lanes) are provided along 3rd between St. James Street and Humboldt Street and 4th Street between St. James Street and Reed Street. Class II bicycle facilities (striped bike lanes) are provided along San Salvador Street, between Market Street and 10th Street. Additional bicycle facilities are provided along the following roadways within the immediate project area:



Designated Class III bike routes with “sharrow” or shared-lane pavement markings and signage are provided along the following roadways:

- Second Street, between San Carlos Street and Julian Street
- San Carlos Street, between Woz Way and Fourth Street
- William Street, its entire extent

Class IV bicycle facilities (protected/buffered bike lanes) are currently being installed throughout the Downtown Area as part of the Better Bikeways project. Designated Class IV separated bike lanes are provided along the following roadways:

- San Fernando Street, between Cahill Street and 10<sup>th</sup> Street
- Second Street, south of San Carlos Street
- Second Street, north of Julian Street

The existing bicycle facilities are shown on Figure 2.

### **Guadalupe River Park Trail**

The Guadalupe River multi-use trail system runs through the City of San Jose along the Guadalupe River and is shared between pedestrians and bicyclists and separated from motor vehicle traffic. The Guadalupe River trail is an 11-mile continuous Class I bikeway from Curtner Avenue in the south to Alviso in the north. This trail system can be accessed via trailheads on either Woz Way or San Carlos Street, approximately 0.6 miles west of the project site.

### **Bike and Scooter Share Services**

Lyft operates the Bay Wheels (formerly Ford Go Bike) bike share program that allows users to rent and return bicycles at various locations. Bike share bikes can be rented and returned at designated docking stations throughout the Downtown area. Additionally, the service offers a dockless, e-bike option that can be located and activated using Lyft’s mobile app and can be parked at any public bike rack. Payment for either of the bike options is provided through the Lyft app or by use of a Clipper card. Two bikeshare stations are located within 1,000 feet of the project site, one approximately 900 feet north of the project site on the west side of Fourth Street, and one approximately 800 feet from the project site, on the southeast corner of Fifth Street and San Salvador Street.

In addition, other micro-mobility companies provide scooter rental services throughout the Downtown area. These services offer electric scooters with GPS self-locking systems that allow for rental and drop-off anywhere. Scooters are located, activated, and paid for through each of these services’ mobile apps.

### **Existing Pedestrian Facilities**

Pedestrian facilities in the study area consist of sidewalks along all the surrounding streets, including the project frontage along Fourth Street. High visibility crosswalks and pedestrian signal heads are present on all legs of all signalized intersections within the project vicinity, including the intersections of Fourth Street/San Salvador Street, Fourth Street/William Street, Third Street/San Salvador Street, and Third Street/William Street.

ADA compliant ramps are located at all crosswalks at the intersections of Fourth Street with both San Salvador Street and William Street, with the exception of the southeast corner of Fourth Street/William Street. Overall, the existing sidewalks provide good pedestrian connectivity and safe routes to transit, nearby pedestrian destinations, and other points of interest in the project vicinity.

## Existing Transit Service

Existing transit services in the study area are provided by the Santa Clara Valley Transportation Authority VTA, Caltrain, Altamont Commuter Express (ACE), and Amtrak. The closest bus stops serviced by the VTA are located on First and Second Streets, approximately 900 feet west of the project site. The project site is located approximately 0.5 mile away from the First/San Antonio and Second/San Antonio Light Rail Stations and approximately 1.4-mile from the Diridon Transit Center located on Cahill Street. Connections between local and regional bus routes, light rail lines, and commuter rail lines are provided within the Diridon Transit Center. Figure 3 shows the existing transit facilities.

### **Bus Service**

The downtown area is served by many local bus lines. The bus lines that operate within ¼-mile walking distance of the project site are listed in Table 1, including their route descriptions and commute hour headways. The nearest bus stops are located along Second Street, approximately 900 feet west of the project site. The nearest bus stops for northbound heading buses are on First Street and are approximately ½ -mile away.

**Table 1**  
**Existing Bus Service Near the Project Site**

Transit Route	Route Description	Hours of Operation	Headway <sup>1</sup>
Local Route 66	North Milpitas to Kaiser San Jose	5:00 am - 12:15 am	15 mins
Local Route 68	Gilroy Transit Center to San Jose Diridon Station	4:00 am - 1:30 am	15 mins
<b>Notes:</b> <sup>1</sup> Approximate headways during peak commute periods.			

### **VTA Light Rail Transit (LRT) Service**

The Santa Clara Valley Transportation Authority (VTA) currently operates the 42.2-mile VTA light rail line system extending from south San Jose through downtown to the northern areas of San Jose, Santa Clara, Milpitas, Mountain View and Sunnyvale. The service operates nearly 24-hours a day with 15-minute headways during much of the day.

The Green (Winchester-Old Ironsides) and Blue (Santa Teresa-Baypointe) LRT lines operate along First and Second Streets, north of San Carlos Street. The 1<sup>st</sup>/San Antonio and 2<sup>nd</sup>/San Antonio LRT stations are located approximately ½ -mile from the project site. The San Jose Diridon station, approximately 1.5 mile away is served by the Green LRT line and serves as a transfer point to Caltrain, ACE, and Amtrak services.

### **Other Transit Services Near the Project Site**

Additional local and express bus routes, as well as commuter rail services, are provided at the Diridon Transit Center. Services to regional destinations are provided by VTA Express bus routes 168, 181, Rapid Route 500, and Highway 17 Express. Rapid Route 522 runs along Santa Clara Street, approximately 0.6 mile away and provides service between Palo Alto and East San Jose with 12-minute headways.

Regional commuter rail services provided at the Diridon Transit Center include the following:

### **Caltrain Service**

Commuter rail service between San Francisco and Gilroy is provided by Caltrain, which currently operates 92 weekday trains that carry approximately 47,000 riders on an average weekday. The project site is located about ¾ -mile from the San Jose Diridon station. The Diridon station provides 581 parking spaces, as well as 16 bike racks, 48 bike lockers, and 27 bike share docks. Trains stop frequently at the Diridon station between 4:28 AM and 10:30 PM in the northbound direction, and between 6:31 AM and 1:38 AM in the southbound direction. Caltrain provides passenger train service seven days a week and provides extended service to Morgan Hill and Gilroy during commute hours.

### **Altamont Commuter Express Service (ACE)**

ACE provides commuter rail service between Stockton, Tracy, Pleasanton, and San Jose during commute hours, Monday through Friday. Service is limited to four westbound trips in the morning and four eastbound trips in the afternoon and evening with headways averaging 60 minutes. ACE trains stop at the Diridon Station between 6:32 AM and 9:17 AM in the westbound direction, and between 3:35 PM and 6:38 PM in the eastbound direction.

### **Amtrak Service**

Amtrak provides daily commuter passenger train service along the 170-mile Capitol Corridor between the Sacramento region and the Bay Area, with stops in San Jose, Santa Clara, Fremont, Hayward, Oakland, Emeryville, Berkeley, Richmond, Martinez, Suisun City, Davis, Sacramento, Roseville, Rocklin, and Auburn. The Capitol Corridor trains stop at the San Jose Diridon Station seven times during the weekdays between approximately 7:37 AM and 9:05 PM in the westbound direction. In the eastbound direction, Amtrak stops at the Diridon Station seven times during the weekdays between 6:42 AM and 7:15 PM.

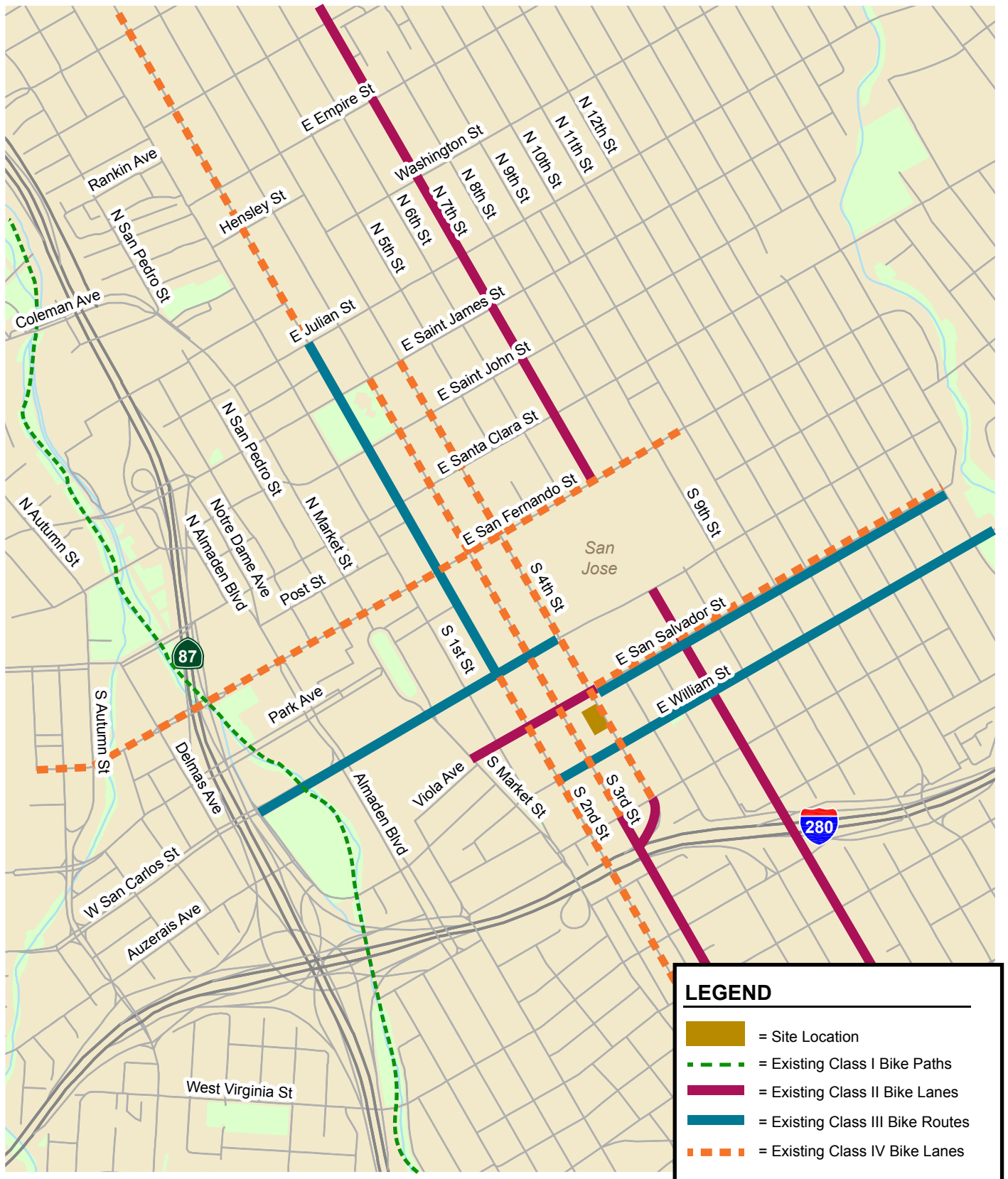
### **Future Transit Services**

Future transit services in the project vicinity will be provided by BART. The future transit services are described below.

### **Bay Area Rapid Transit (BART) Phase II Project**

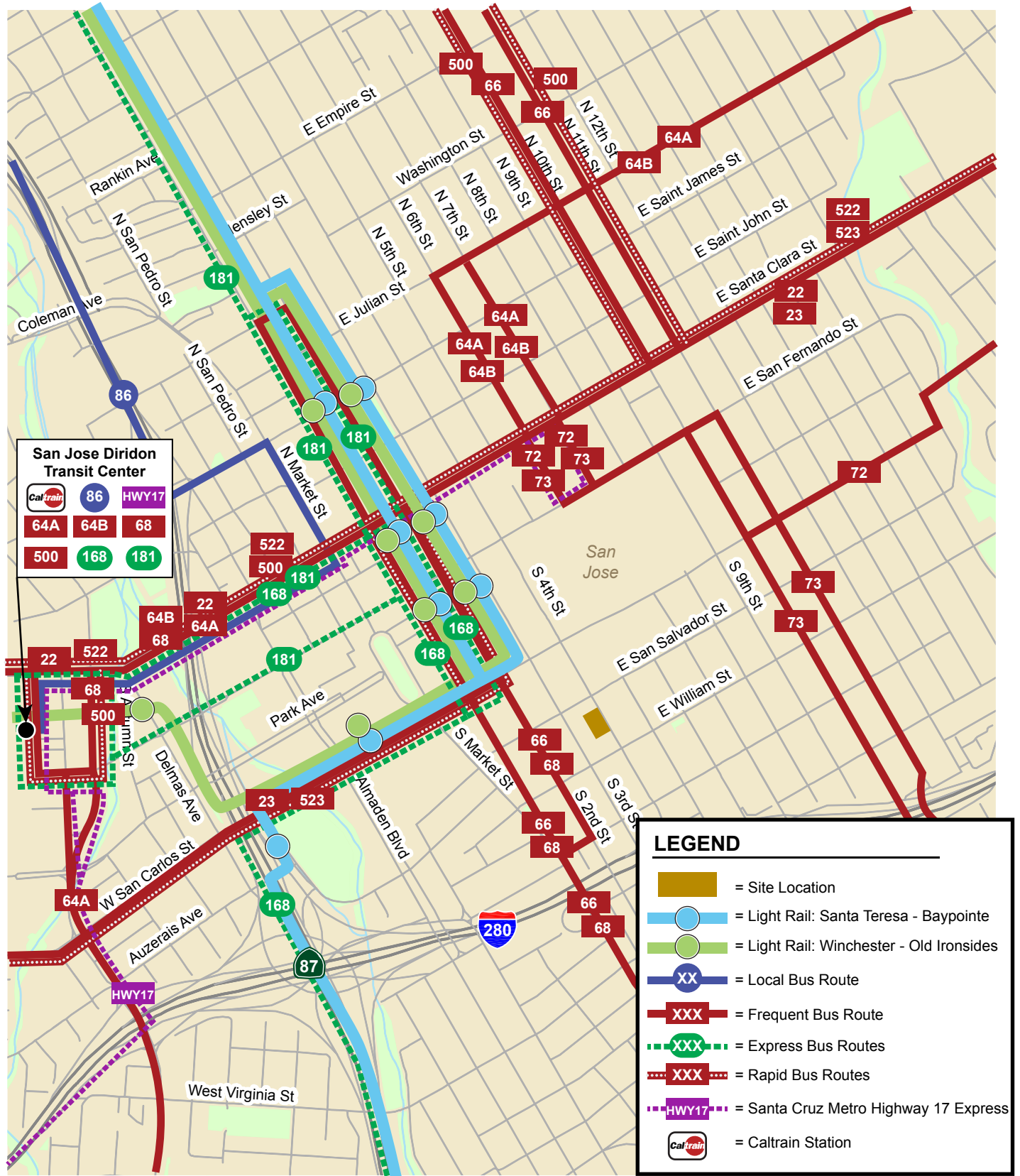
Phase II of VTA's BART Silicon Valley Extension project will include a 6-mile-long subway tunnel through downtown San Jose and will extend the BART system from the Berryessa Extension terminus (Phase I). The Phase II project includes the addition of four BART stations including the Alum Rock, Downtown San Jose, Diridon, and Santa Clara stations. The BART extension will travel through downtown beneath Santa Clara Street, and terminate at grade in the City of Santa Clara near the Santa Clara Caltrain Station. Passenger service for the Phase II Project is planned to begin in 2035.

The Downtown San Jose BART station would be located underground beneath Santa Clara Street, between Market Street and Third Street, approximately 0.7-mile from the project site. Access would be provided via a station entrance located near the northeast corner of the intersection of Market Street and Santa Clara Street.



**Figure 3**  
**Existing Bicycle Facilities**





**Figure 4**  
**Existing Transit Services**

### 3.

## Compliance with the City Parking Code

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This chapter describes the City of San Jose's parking requirements and allowable parking reductions as outlined in Section 20.90.220 of the San Jose Code of Ordinances. The proposed parking supply and the project's conformance with the City Parking Code are also described.

### City of San Jose Parking Code

According to Section 20.90.220.A.1 of the San Jose Parking Code, a reduction in the required off-street vehicle parking spaces of up to 20 percent is automatically allowed if the provisions of Subsections a and b are met. A reduction of up to 50 percent may be authorized if the project conforms to the requirements specified in Subsections a and b, and implements at least three TDM measures specified in Subsections c and d. Section 20.90.220.A.1 is outlined below.

#### Section 20.90.220.A.1 – Reduction in Required Off-street Parking Spaces

##### A. Alternative transportation.

1. *A reduction in the required off-street vehicle parking spaces of up to fifty percent may be authorized with a development permit or a development exception if no development permit is required, for structures or uses that conform to all of the following and implement a total of at least three transportation demand management (TDM) measures as specified in the following provisions:*
  - a. *The structure or use is located within two thousand feet of a proposed or an existing rail station or bus rapid transit station, or an area designated as a Neighborhood Business District, or as an Urban Village, or as an area subject to an area development policy in the city's general plan or the use is listed in Section 20.90.220G.; and*
  - b. *The structure or use provides bicycle parking spaces in conformance with the requirements of Table 20-90.*
  - c. *For any reduction in the required off-street parking spaces that is more than twenty percent, the project shall be required to implement a transportation demand management (TDM) program that contains but is not limited to at least one of the following measures:*

- i. Implement a carpool/vanpool or car-share program, e.g., carpool ride-matching for employees, assistance with vanpool formation, provision of vanpool or car-share vehicles, etc. and assign car pool, van pool and car-share parking at the most desirable onsite locations at the ratio set forth in the development permit or development exception considering type of use; or*
  - ii. Develop a transit use incentive program for employees and tenants, such as on-site distribution of passes or subsidized transit passes for local transit system (participation in the region-wide Clipper Card or VTA SmartPass system will satisfy this requirement).*
- d. In addition to the requirements above in Section 20.90.220.A.1.c. for any reduction in the required off-street parking spaces that is more than twenty percent, the project shall be required to implement a transportation demand management (TDM) program that contains but is not limited to at least two of the following measures:*
  - i. Implement a carpool/vanpool or car-share program, e.g., carpool ride-matching for employees, assistance with vanpool formation, provision of vanpool or car-share vehicles, etc. and assign car pool, van pool and car-share parking at the most desirable on-site locations; or*
  - ii. Develop a transit use incentive program for employees, such as on-site distribution of passes or subsidized transit passes for local transit system (participation in the region-wide Clipper Card or VTA EcoPass system will satisfy this requirement); or*
  - iii. Provide preferential parking with charging facility for electric or alternatively-fueled vehicles; or*
  - iv. Provide a guaranteed ride home program; or*
  - v. Implement telecommuting and flexible work schedules; or*
  - vi. Implement parking cash-out program for employees (non-driving employees receive transportation allowance equivalent to the value of subsidized parking); or*
  - vii. Implement public information elements such as designation of an on-site TDM manager and education of employees regarding alternative transportation options; or*
  - viii. Make available transportation during the day for emergency use by employees who commute on alternate transportation. (This service may be provided by access to company vehicles for private errands during the workday and/or combined with contractual or pre-paid use of taxicabs, shuttles, or other privately provided transportation); or*
  - ix. Provide shuttle access to Caltrain stations; or*
  - x. Provide or contract for on-site or nearby child-care services; or*
  - xi. Incorporate on-site support services (food service, ATM, drycleaner, gymnasium, etc. where permitted in zoning districts); or*
  - xii. Provide on-site showers and lockers; or*

- xiii. *Provide a bicycle-share program or free use of bicycles on-site that is available to all tenants of the site; or*
- xiv. *Unbundled parking; and*
- e. *For any project that requires a TDM program:*
  - i. *The decision maker for the project application shall first find in addition to other required findings that the project applicant has demonstrated that it can maintain the TDM program for the life of the project, and it is reasonably certain that the parking shall continue to be provided and maintained at the same location for the services of the building or use for which such parking is required, during the life of the building or use; and*
  - ii. *The decision maker for the project application also shall first find that the project applicant will provide replacement parking either on-site or off-site within reasonable walking distance for the parking required if the project fails to maintain a TDM program.*

Further reductions in the required off-street parking spaces may be granted to development projects located within the Downtown area, as described under Section 20.70.330 of the City code:

### **Section 20.70.330 – Reduction of Requirement (Downtown)**

*In addition to exceptions provided for under Section 20.90.200 and Section 20.90.220, the following reductions in parking requirements may be made by the director:*

- A. *The director may grant up to a fifteen percent reduction in the number of spaces required as part of the issuance of a development permit where the reduced number of spaces will be adequate to meet the parking demand generated by the project when the following findings are made:*
  - 1. *The project has developed a travel demand management (TDM) program that provides evidence that a TDM program will reduce parking demand and identifies the percentage of parking demand that will be reduced through the TDM program. The TDM program will incorporate one or more elements of TDM including, but not limited to measures such as Smartpass, parking cash-out, alternate work schedules, ride sharing, transit support, carpool/vanpools, shared parking, or any other reasonable measures; and*
  - 2. *The project demonstrates that it can maintain the TDM program for the life of the project and it is reasonably certain that the parking shall continue to be provided and maintained at the same location for the services of the building or use for which such parking is required, during the life of the building or use.*
- B. *For mixed-use projects, the director may reduce the required parking spaces by up to fifty percent, including any other exceptions or reductions as allowed under Title 20, upon making the following findings:*
  - 1. *That the reduction in parking will not adversely affect surrounding projects;*
  - 2. *That the reduction in parking will not be dependent upon public parking supply; or reduce the surrounding public parking supply; and*
  - 3. *The project demonstrates that it can maintain the TDM program for the life of the project and it is reasonably certain that the parking shall continue to be provided and maintained at the same location for the services of the building or use for which such parking is required, during the life of the building or use.*



- C. *The total parking required for a project may be reduced by up to one hundred percent as part of a development permit where public parking is provided on-site as part of a public or private development project. Public parking spaces may be applied toward the parking requirements for the use, applying no more than a one-for-one standard. The finding shall be made in the development permit by the director and be based on an alternate peak use, shared parking or parking demand analysis.*
- D. *The project will provide replacement parking either on site, off-site within reasonable walking distance or pay the current in-lieu fee for the parking required if the project fails to maintain a TDM program.*

## Compliance with the City Parking Code

The project, as proposed, will consist of 240 residential units. The City's parking requirements for multiple-dwelling residential uses (Section 20.70.100 Table 20-140) is 1 parking space per unit. Based on the City's parking code requirements, the project would need to provide 240 off-street parking spaces for the proposed residential units before any reductions.

The project plans to provide 20 to 95 on-site parking spaces. The City will allow the project to provide the remaining required parking spaces at an off-site location to meet its off-street parking requirement per the City code. The project applicant currently controls the existing underground parking garage (Garage 88) located beneath the building on the south side of San Fernando Street between S. Second Street and S. Third Street. Based on the amount of parking provided on-site, the project applicant will establish a shared parking agreement for the use of up to 172 spaces within Garage 88 to meet the City's parking requirements for the project. Therefore, the project proposes to provide a total of 192 parking spaces. The proposed number of parking spaces represent a 20% reduction from the baseline required number of spaces. However, the project would meet the requirements specified in Subsection 20.90.220.A.1.a and 20.90.220.A.2.b, and would be granted a 20% reduction in required parking spaces. Since the combination of the proposed on-site and off-site parking would meet the reduced City off-street parking requirements, the preparation of a TDM plan is not required to meet Section 20.90.220 and 20.70.330 of the San Jose Code of Ordinances. However, this TDM plan has been completed at the request of the applicant.

## Alternative Transportation

The project is a use listed in Subsection 20.90.220.G. Therefore, the project would conform to Subsection 20.90.220.A.1.a.

## Bicycle Parking Requirement

The City's bicycle parking requirements for the project (Section 20.90.060 Table 20-210) is 1 bicycle parking space per 4 residential units. Based on these standard parking requirements, the project is required to provide 60 off-street bicycle parking spaces. The project site plan indicates a total of 60 bicycle parking spaces to be provided on-site. The proposed bicycle parking on-site will meet the City's requirements and encourage the use of non-auto modes of travel and minimize the demand for on-site parking. Therefore, the project would comply with Subsection 20.90.220.A.1.b.

## 4. Recommended TDM Measures

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This chapter describes TDM measures recommended for the proposed project, including services that promote sustainable modes of transportation. The recommended TDM measures are intended to encourage future tenants of the residential development to utilize alternative transportation modes available in the area to reduce single occupancy vehicle trips and parking demand generated by the project. The specific TDM measures that are recommended for the project are described below and are based on the measures specified in Subsections 20.90.220.A.1. , The project needs to ensure that the TDM plan will be maintained for the life of the project, which is in compliance with Subsection 20.90.220.A.1.e and Section 20.70.330.A.2.

### Proposed TDM Measures

#### Public Information Elements (Online Kiosk) (20.90.220.A.1.d.vii)

This TDM Plan recommends an online kiosk with information regarding non-auto transportation alternatives. The online kiosk will update key transportation information included in the welcome packets. Additionally, transportation news and commuter alerts will be posted online. Residents should be able to access the kiosk from their home or anywhere else. TDM-related links and information will be posted on this forum, and the Transportation Coordinator will have host permissions to send tenants email notifications pertaining to the TDM Plan and measures. The online kiosk will include information about all the measures, services, and facilities discussed in this Plan, including:

- A summary of VTA and Caltrain services and links to further information about their routes and schedules.
- Bicycling resources on 511.org.
- A local bikeways map.
- Information about ridematching services (511.org, Zimride, and TwoGo).
- A link to the many other trip planning resources available in the Bay Area such as Dadnab, the 511 Transit Trip Planner, real-time traffic conditions, etc.



The building developer would have responsibility for creating the website so that it is up and running as soon as the new building is ready for leasing. More specific information can be added later to reflect any programs specific to certain tenants.

### **Trip Planning Resources**

There are several free trip planning resources that tenants may not be aware of. Information on these services should be included in online kiosk for new residential tenants. These include:

#### **511 Transit Trip Planner**

Online transit trip planning services are available to the greater San Francisco Bay Area through 511.org. Users enter their starting and ending points, and either the desired starting or ending trip time. The service can build an itinerary that best suits the user's preferences for the fastest trip, fewest transfers, or least walking.

#### **511 Mobile**

Many popular features from 511.org can be accessed using smart phones or mobile devices. With 511 Mobile, commuters can: (1) receive real-time transit departure predictions, (2) plan a public transit trip, (3) check real-time traffic conditions on the live traffic map, and (4) get current driving times for the most popular routes in the Bay Area.

#### **511 Carpool Calculator**

The 511 Carpool Calculator is a 511-sponsored online calculator that determines the cost of commuting by driving alone. Users input commute details such as the number of miles traveled to and from work, vehicle mileage, fuel cost, parking costs, and bridge tolls. The tool then calculates solo commuting costs and vehicle CO2 emissions, as well as the potential savings by adding carpool partners.

#### **511 RideMatch**

The 511 RideMatch service provides an interactive, on-demand system that helps commuters find carpools, vanpools or bicycle partners. This free car and vanpool ride matching service helps commuters find others with similar routes and travel patterns with whom they may share a ride. Registered users are provided with a list of other commuters near their employment or residential ZIP code along with the closest cross street, email, phone number, and hours they are available to commute to and from work. Participants are then able to select and contact others with whom they wish to commute. The service also provides a list of existing carpools and vanpools in their residential area that may have vacancies. Ride matching assistance is also available through a number of peer-to-peer matching programs, such as Zimride, which utilize social networks to match commuters.

#### **Dadnab**

Dadnab.com enables Bay Area commuters to get transit directions by text message. Users send a text message with their origin, destination, and optional departure or arrival time and Dadnab replies with a detailed itinerary listing which buses or trains to take, stop locations, and departure times.

### **Unbundled Parking (20.90.220.A.1.d.xiv)**

The project will provide 100 percent unbundled parking for all residential spaces. Unbundled parking means separating the cost of parking from residential leases and allowing residents to choose whether or not to lease a parking space. With this approach those tenants without a vehicle would not be required to pay for parking that they do not want or need. This is the most equitable approach and would free up parking for those tenants that require a space and are willing to pay for it. The parking spaces will be priced to avoid tenants parking on the streets or in nearby parking lots. Unbundling residential parking costs from the cost of housing can reduce tenant vehicle ownership and parking demand and can be implemented on a month-to-month lease basis. With a lease, residents receive a monthly bill showing how much they are spending on a parking space and have the option to give up the space if they no longer need it.

Note that Policy TR-8.8 of the Envision San Jose 2040 General Plan calls for San Jose to "Promote use of unbundled private off-street parking associated with existing or new development, so that the sale or rental of a parking space is separated from the rental or sale price for a residential unit or for non-residential building square footage." In addition, Policy TR-10.1 states: "Explore development of a program... to require that parking spaces within new development in areas adjacent to transit and in all mixed-use projects be unbundled from rent or sale of the dwelling unit or building square footage."

### **Summary of TDM Measures**

The specific TDM measures recommended for the project are summarized below and are based on the measures specified in Subsections 20.90.220.A.1.c and d of the San Jose Code of Ordinances. The proposed TDM Plan includes the following measures:

1. Public Information Elements (20.90.220.A.1.d.vii)
2. Unbundled Parking (20.90.220.A.1.d.xiv)

## 4.

# TDM Implementation and Monitoring

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Per Sections 20.70.330 and 20.90.220 of the San Jose Code of Ordinances, monitoring will be necessary to ensure that the TDM measures are effective and continue to be successfully implemented.

### Implementation

The project applicant needs to submit this TDM Plan to the City of San Jose and would be responsible for ensuring that the TDM elements are incorporated into the project. After the development is constructed and occupied, the project applicant needs to identify a TDM coordinator. It is assumed that the property manager for the project would be responsible for implementing the ongoing TDM measures. If the TDM coordinator changes for any reason, the City and tenants should be notified of the name and contact information of the new designated TDM coordinator.

### Monitoring and Reporting

The TDM plan would need to be re-evaluated annually for the life of the project. If it is determined that the parking reduction is not being achieved (i.e., the on-site parking garage reaches full capacity), additional TDM measures would need to be introduced to ensure that the parking demand is being addressed by the project without the burden being placed on outside entities.

The designated TDM coordinator will consult with City staff to ensure the monitoring and reporting meets the City's expectations. Monitoring will include the following components:

- Annual Vehicle Parking Counts
- Annual Mode Share Survey
- Annual Monitoring Report

### Annual Vehicle Parking Counts

Annual parking counts should be conducted by a third party on a typical weekday (Tuesday, Wednesday, or Thursday) and a typical Saturday. Counts of the number of parked vehicles and vacant spaces should be conducted between 11:00 PM and 3:00 AM. The goal of the TDM Plan is to avoid parking spillover. Thus, if the counts show that parking spaces are less than fully occupied

(i.e., counts show one or more vacant spaces), it can be assumed that all parking demand is being accommodated on site, and the TDM Plan is effective. If parking spaces are 100 percent occupied, then spillover is likely occurring and the TDM Plan may need to be enhanced.

### **Annual Mode Share Survey**

The annual survey would provide qualitative data regarding future resident's perceptions of the alternative transportation programs and perceptions of the obstacles to using an alternative mode of transportation. The annual survey would also provide quantitative data regarding the number of residents who utilize alternative modes of transportation (e.g., bike-to-work/school) to commute to work/school, including the frequency of use. The mode share survey results would measure the relative effectiveness of individual program components and facilitate the design of possible program enhancements.

### **Annual Monitoring Report**

The property manager should submit annual reports to the City of San Jose for three years, and then upon request of the Zoning Administrator for the life of the project with the following information:

- Findings of the vehicle parking counts and mode share surveys, including the reduction in parking demand.
- Effectiveness of individual program components from the annual mode share survey.
- A description of the TDM programs and services that were offered to tenants in the preceding year, with an explanation of any changes or new programs offered or planned.