



# HEXAGON TRANSPORTATION CONSULTANTS, INC.



## River Corporate Center Building 3 San Jose, California



Draft Traffic Operations Study

Prepared for:

**The Sobrato Organization**



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# 1. Introduction

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Hexagon Transportation Consultants, Inc. has completed a traffic operations study for a proposed office building at 353 W. Julian Street in downtown San Jose, California. The project site is located on the northwesterly corner of W. Julian Street and SR 87 (see **Figure 1**). The project would include constructing a new, 6-story, 194,178 square foot (s.f.) office building on an existing building foundation, located between two existing buildings, a parking garage, and the Guadalupe River Park Trail.

Since the project is located in the Downtown Core, it is covered under the San Jose Downtown Strategy 2000 EIR. Accordingly, City staff has determined that the project is in conformance with the City of San Jose Transportation Level of Service Policy (Council Policy 5-3) and does not require preparation of a comprehensive Transportation Impact Analysis (TIA). The Public Works department has indicated, however, that a traffic operations study is required in order to identify potential operational issues that could occur as a result of the proposed project. This traffic study is intended to satisfy the City's request.

Based on the proposed project size, site-generated traffic was estimated. Vehicular site access, including truck access (i.e., trash pickup and loading activities), was evaluated. Parking, on-site vehicular circulation and overall traffic operations on the surrounding roadway network were analyzed. Bicycle and pedestrian access and safety also were evaluated. Lastly, since the project proposes to provide less on-site parking than what is typically required for sites that are zoned Industrial Park (IP), Hexagon prepared a list of TDM measures to be implemented by the developer of the office development and its eventual tenant(s) in order to reduce the project's parking demand.



LEGEND

-  = Building 3 Location
-  = Existing Buildings Near Building 3

Figure 1  
Project Site Location

## 2. Existing Conditions

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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, transit services, and bicycle and pedestrian facilities.

### Existing Roadway Network

Regional access to the project site is provided by SR 87. Local site access is provided by W. Julian Street, W. St. James Street, and Bassett Street. The local roadways and SR 87 are described below.

*SR 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. SR 87 provides access to US 101 and I-280/I-680. Access to the site to and from SR 87 is provided via a full interchange at Julian Street/St. James Street.

*W. Julian Street* is an east-west arterial that serves as the southern boundary of the project site. It provides access to the study area via an interchange with SR 87. East of SR 87 Julian Street is a two-lane one-way street (westbound). West of SR87, Julian Street is a two-lane, two-way street. Julian Street provides direct access to the southern end of the project site via a signalized intersection located approximately 250 feet west of the SR 87 southbound off-ramp.

*W. St. James Street* is a one-way street in the eastbound direction. It begins at Notre Dame Avenue as a transition from W. Julian Street. W. St James Street is three lanes between Notre Dame Avenue and Market Street. East of Market Street it narrows to two lanes and transitions into a two-way two-lane street at North Fourth Street.

Note that Julian Street and St. James Street are currently under construction to change their alignment and function. The realignment project is described in detail in Chapter 4.

*Bassett Street* is an east-west two-lane street that provides direct access to the northern end of the project site. Bassett Street extends east from Terraine Street to N. Second Street. Between N. First Street and N. Second Street, Bassett Street is a one-lane eastbound one-way street.

### Existing Pedestrian and Bicycle Facilities

Sidewalks along the project frontages on Julian Street and Bassett Street, as well as the Guadalupe River Trail (East), provide pedestrian access to and from the project site. The signalized crosswalk on W. Julian Street at the main project entrance provides direct access to the Guadalupe River trail system. Crosswalks with pedestrian signal heads and push buttons are provided at all of the signalized intersections in the vicinity of the project site.

Although sidewalks are missing on Bassett Street between Terraine Street and N. San Pedro Street, the overall network of sidewalks and crosswalks in the study area has good connectivity and provides pedestrians with safe routes to transit services and other points of interest in the downtown area. The area immediately east of SR 87 is currently undergoing redevelopment, and sidewalks will be added to Bassett Street.

The only bicycle facility in the immediate vicinity of the project site is the Guadalupe River multi-use trail (Class I bikeway). However, the trail system offers many connections to other streets with bicycle facilities, both inside and outside the downtown area. 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. A direct connection to the trail system is provided on the project site via an entrance at the southwest corner of the parking structure. The trail can also be accessed via the signalized intersection on W. Julian Street (southern entrance to the project site).

The City of San Jose participates in the Bay Area Bike Share program, which allows users to rent and return bicycles at various locations around the downtown area. There are currently 16 Bike Share stations in downtown San Jose with two stations located less than 2,000 feet from the project site: one at the SAP Center and the other at San Pedro Square. The Diridon Station also has a bike share station and is located about  $\frac{3}{4}$  mile from the project site.

### Pedestrian and Bicycle Counts at the W. Julian Street Project Entrance

Pedestrian and bicycle crossings at the signalized project driveway on W. Julian Street were counted during the AM and PM peak hours. The crosswalk on W. Julian Street has a relatively high pedestrian and bicycle demand, since it serves the Guadalupe River multi-use trail. The counts showed that 103 pedestrians/bikes crossed W. Julian Street at the signalized crosswalk during the AM peak hour, and 124 pedestrians/bikes crossed W. Julian Street at this location during the PM peak hour (see **Figure 2**).

The existing pedestrian and bicycle count data are contained in **Appendix A**.

### Existing Transit Services

Existing transit services to the study area are provided by the Santa Clara Valley Transportation Authority (VTA), Caltrain, Altamont Commuter Express (ACE), and Amtrak.

#### VTA Bus Service

The downtown area is served directly by many local buses. However, since the project site is situated on the edge of downtown, there are no bus lines that operate within  $\frac{1}{4}$  mile of the project site. The bus lines that operate within  $\frac{1}{2}$  mile of the project site are listed in **Table 1**, including their route description and commute hour headways.

In addition to the bus lines listed in Table 1, the VTA also provides a free shuttle service within the downtown area. The downtown area shuttle (DASH) provides free shuttle service from the San Jose Diridon station to San Jose State University, and the Paseo De San Antonio and Convention Center LRT stations via San Fernando and San Carlos Streets. The closest stop for DASH (Route 201) is located about  $\frac{1}{2}$  mile south of the project site on W. San Fernando Street, and is accessible via the Guadalupe River multi-use trail.

#### 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 Mountain View-Winchester (Route 902) and Santa Teresa-Alum Rock (Route 901) LRT lines operate within  $\frac{1}{2}$  mile of the project site. The San Fernando LRT station is located approximately  $\frac{1}{2}$  mile walk south of the site and is accessible via the Guadalupe River multi-use trail. The St. James LRT station is located about  $\frac{1}{2}$  mile walk east of the project site via W. Julian Street/W. St. James Street.

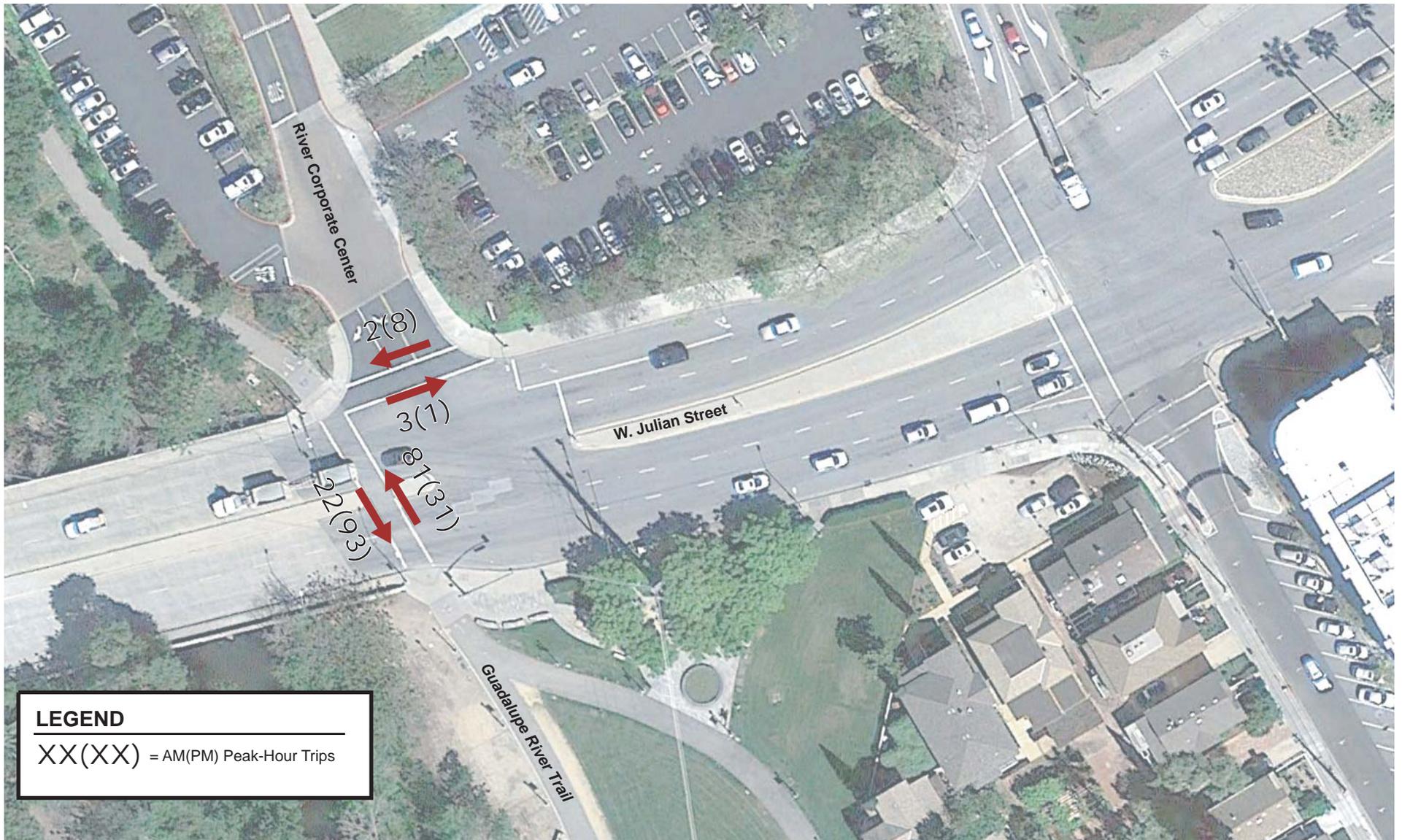


Figure 2  
Pedestrian and Bicycle Trips at the W. Julian Street Crosswalk

**Table 1**  
**Existing Bus Service Within ½ Mile of the Project Site**

Bus Route	Route Description	Headway <sup>1</sup>
Local Route 17	Gilroy Transit Center to Monterey & Tomkins	45 min
Local Route 22	Palo Alto Transit Center to Eastridge Transit Center	10-15 min
Local Route 55	DeAnza College to Great America	15-20 min
Local Route 63	Almaden Exp/Camden Av to Diridon Station & SJSU	30 min
Local Route 64	Almaden LRT Station to McKee Rd/ White Rd	15 min
Local Route 65	Kooser/Blossom Hill to Diridon Station & 13th/Hedding	45 min
Local Route 66	Kaiser San Jose Medical Center to Dixon Landing Road (Milpitas)	15 min
Local Route 68	Gilroy Transit Center to San Jose Diridon Station	15-20 min
Local Route 72	Senter Rd/Monterey Rd to Downtown San Jose	15 min
Local Route 73	Snell Av/Capitol Exp to Downtown San Jose	15 min
Local Route 81	SJSU to Moffett Field/AMES Center	25-35 min
Local Route 82	Westgate Mall to Downtown San Jose	30 min
Express Route 168	Gilroy Transit Center to San Jose Diridon Station	30 min
Express Route 181	Fremont BART Station to Diridon Station	15 min
Express Route 201	Downtown Area Shuttle (DASH)	4-14 min
Limited Stop Bus 304	South San Jose to Sunnyvale Transit Center	25-45 min
Limited Stop Bus 323	Downtown San Jose to DeAnza College	15 min
Rapid 522	Palo Alto Transit Center to Eastridge Transit Center	15 min

Notes:  
<sup>1</sup> Approximate headways during peak commute periods.

## San Jose Diridon Station

The San Jose Diridon Station, located approximately ¾ mile walk or bike ride from the project site, is situated along the Mountain View-Winchester LRT line and is served by Caltrain, ACE and Amtrak. The Diridon Station provides bike racks and bike lockers.

### Caltrain Service

Commuter rail service between San Francisco and Gilroy is provided by Caltrain, which currently operates 91 weekday trains that carry approximately 58,500 riders on an average weekday. Trains stop frequently at the Diridon station between 4:30 AM and 10:30 PM in the northbound direction, and between 6:28 AM and 1:34 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 (ACE) Service

The Altamont Commuter Express (ACE) provides commuter passenger train service across the Altamont between Stockton and San Jose during the weekdays. ACE stops at the San Jose Diridon station four times during both the morning and evening weekday commute hours. ACE trains stop at the Diridon station four

times between 6:32 AM and 9:17 AM in the westbound direction, and four times 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 eight times on weekdays between 7:38 AM and 11:55 PM in the westbound direction.

## **Field Observations**

Traffic conditions were observed in the field during the weekday AM (7:00 - 9:00 AM) and PM (4:00 - 6:00 PM) peak commute periods of the day in order to identify any existing operational deficiencies in the immediate vicinity of the project site. In particular, traffic operations at the signalized project driveway on Julian Street and at the SR 87 Ramps on Julian Street were observed in the field. The field observations did not reveal any significant traffic-related issues. Below is a discussion of some minor operational issues that currently occur.

### **AM Peak Hour**

During the AM peak hour, westbound traffic on W. Julian Street backed up from the signalized project driveway to the SR 87 southbound off-ramp on occasion, but the queues quickly cleared and did not cause any operational issues. No other noteworthy traffic-related issues occurred during the AM observation period.

### **PM Peak Hour**

During the PM peak hour, eastbound traffic on W. Julian Street consistently backed up from the southbound SR 87 on-ramp past the signalized project driveway. However, the queues did not reach Autumn Street and did not affect traffic operations at the Autumn Street/W. Julian Street intersection. The eastbound vehicle queues on W. Julian Street caused some delay for vehicles turning left from the project site. Still, all of the vehicles exiting the project site were able to clear the intersection in one signal cycle length.

During both the AM and PM peak hours, the crosswalk at the River Corporate Center/W. Julian Street intersection that serves the Guadalupe River multi-use trail had a large amount of pedestrian and bicycle activity. No safety issues were observed at the crosswalk.

## 3.

# Project Generated Traffic

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This chapter describes how project-generated traffic was estimated and assigned to the roadway network.

### Trip Generation

Trips generated by any new development can be estimated based on counts of existing development of the same land use type. The City of San Jose has used count data of existing development that has been collected over the years to derive a list of trip generation rates for the most common land uses. The trip generation rates that have been developed can be applied to new development within the City to help predict future traffic increases that would result from new development. These recommended rates are detailed in the *San Jose Traffic Impact Analysis Handbook*, November 2009. Therefore, trip generation resulting from the proposed project was estimated by multiplying the City's established trip generation rates by the size of the development. Trip reductions associated with the site's proximity to downtown transit services and bicycle/pedestrian facilities were applied and are described below.

### Trip Reductions

Due to the project's urban location and proximity to transit and bicycle options, it is reasonable to assume that future tenants of the office building would utilize the available transit and bicycle facilities in the area. Accordingly, a multi-modal trip reduction due to proximity to transit stations and bicycle facilities was applied to the gross project trip generation estimates. The project site is located approximately 2,500 feet from the San Fernando and St. James LRT stations, as well as nearly 20 local bus routes. The site is also located about  $\frac{3}{4}$  mile from the existing Diridon Caltrain Station and future Diridon BART Station location, is 2,000 feet from where a Bus Rapid Transit (BRT) stop will be located on Santa Clara Street adjacent to the SAP Center, and is situated immediately adjacent to the Guadalupe River multi-use trail system. The trail system provides connections to many streets with bicycle facilities, both inside and outside the downtown area, and provides a connection to the San Jose Diridon station via W. San Fernando Street (a City-designated bicycle route). For these reasons, a 6 percent transit/bike/walk trip reduction was applied to the office project. Note that this percentage reduction is a very conservative number. The actual trip reduction would likely be much higher due to the available multi-modal travel options within the downtown area.

### Net Project Trips

After applying the appropriate trip generation rates and trip reductions, it is estimated that the project would generate 2,008 new daily vehicle trips, with 281 new trips occurring during the AM and PM peak hours (see **Table 2**). Using the inbound/outbound splits recommended by the City of San Jose, the project would produce 247 new inbound and 34 new outbound trips during the AM peak, and 48 new inbound and 233 new outbound trips during the PM peak.

**Table 2  
Project Trip Generation Estimates**

Land Use	Size	Daily Trip Rates	Daily Trips	AM Peak Hour						PM Peak Hour					
				Rate/Factor	Splits		Trips		Rate/Factor	Splits		Trips			
				In	Out	In	Out	Total	In	Out	In	Out	Total		
General Office Building <sup>1</sup>	194,178 s.f.	11.00	2,136	14.0%	88%	12%	263	36	299	14.0%	17%	83%	51	248	299
6% Transit Reduction for Office <sup>2</sup>			(128)				(16)	(2)	(18)				(3)	(15)	(18)
<b>Net Project Trips:</b>			<b>2,008</b>				<b>247</b>	<b>34</b>	<b>281</b>				<b>48</b>	<b>233</b>	<b>281</b>

Notes:

<sup>1</sup> Rates based on City of San Jose *Traffic Impact Analysis Handbook*, November 2009.

<sup>2</sup> A 6% transit/bike/ped reduction was applied, since the project site is located within walking distance of the San Fernando and St. James LRT Stations (Santa Clara VTA TIA Guidelines, October 2014) and is located immediately adjacent to the Guadalupe River Park trail system.

### Trip Distribution and Trip Assignment

The project trip distribution pattern and project trip assignment are shown on **Figure 3**. The project trips were assigned to the roadway network based on the project trip distribution pattern, which took into account the project driveway locations, existing travel patterns in the area, freeway ramp access, and the relative locations of complementary land uses.



LEGEND

- = Building 3 Location
- = Existing Buildings Near Building 3

XX(XX) = AM(PM) Peak-Hour Trips

**Figure 3**  
**Project Trip Distribution Pattern & Driveway Trips**

## 4. Site Access and Circulation

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This chapter presents an analysis of traffic operations under project conditions, including:

- Vehicular site access and on-site circulation
- Pedestrian and bicycle access and circulation
- Truck access and circulation
- Intersection operations analysis – vehicle queuing and left-turn pocket storage
- Planned roadway improvements
- Parking layout and supply

### Vehicular Site Access and Circulation

The site access and circulation analysis is based on the June 8, 2016 site plan prepared by ARC TEC. The ground level site plan is shown in **Figure 4**.

#### Project Driveways

Primary access to the proposed office building would be provided via an existing signalized driveway on W. Julian Street. This driveway has one inbound lane and two outbound lanes and is approximately 40 feet wide. Full outbound access is provided at this driveway, but ingress is limited to right turns only.

The site plan shows secondary access would continue to be provided via Bassett Street, which provides direct access to both the surface parking lots and the existing parking structure. The western driveway, located within the cul-du-sac on Bassett Street, is shown to be 26 feet wide measured at the throat. The eastern Bassett Street driveway, situated about 100 feet from the SR 87 overpass, is also shown to be 26 feet wide. The single inbound and outbound lanes that serve the existing parking structure at the end of the cul-du-sac are gated and are separated by a raised median island. Bassett Street also provides street parking.

According to the site plan, the project does not propose to make any changes to the driveways currently serving the site.

#### W. Julian Street Driveway Operations

New trips generated by the project that are estimated to occur at the W. Julian Street driveway are 173 inbound and 23 outbound trips during the AM peak hour, and 34 inbound and 163 outbound trips during the PM peak hour. Based on existing counts, the estimated total traffic volumes at this project driveway would be 465 inbound and 47 outbound trips during the AM peak hour, and 84 inbound and 446 outbound trips during the PM peak hour.

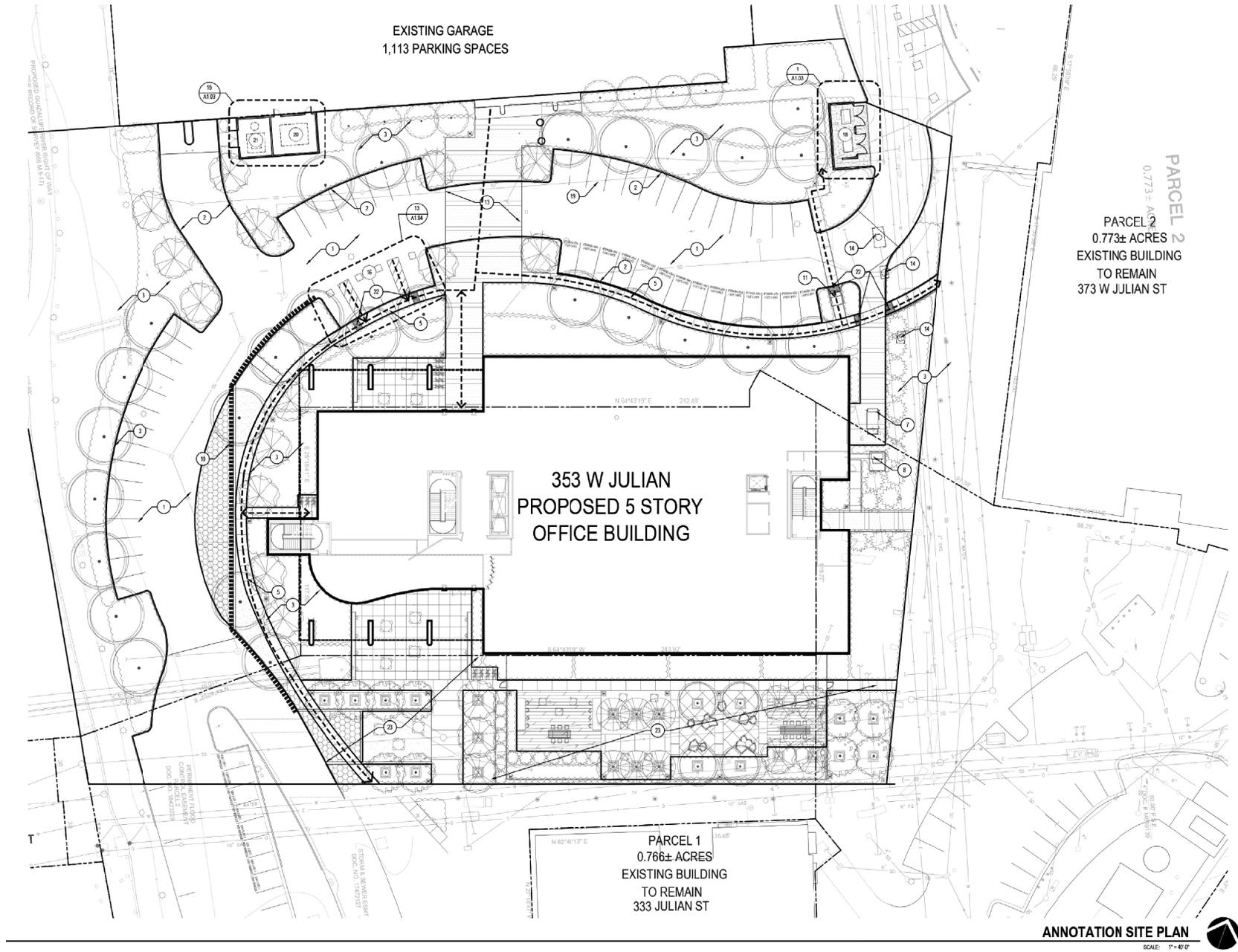


Figure 4  
Ground Level Site Plan

## Vehicle Queuing

Adequate storage is currently provided on site to accommodate the outbound vehicle queues that develop during the PM peak hour, which is when the majority of vehicles exit the site. Based on the estimated volume of traffic that would exit the Julian Street driveway during the PM peak hour under project conditions, on-site vehicle storage would continue to be adequate. The maximum outbound vehicle queue that is estimated to occur at the Julian Street driveway with the addition of project trips is 6 vehicles long, or approximately 150 feet in length. As a comparison the existing maximum outbound vehicle queue that was observed in the field during the PM observation period was 5 vehicles in length, or about 125 feet.

Based on existing field observations and the results of the queuing analysis, the signalized Julian Street driveway is expected to continue to operate adequately with the addition of traffic generated by the new building.

## Vehicular On-Site Circulation

On-site vehicular circulation was reviewed for the project in accordance with generally accepted traffic engineering standards and City of San Jose design guidelines. The City's standard width for two-way drive aisles is 26 feet wide where 90-degree parking stalls are provided. This allows sufficient room for vehicles to back out of parking stalls. The existing drive aisles throughout the site are 26 feet wide.

According to the site plan, on-site circulation would remain relatively unchanged. The project includes reconfiguring a segment of the main drive aisle situated adjacent to the north and west perimeters of the new building. The planned drive aisle improvements include removing two stop signs and creating a continuous smooth bend around the new building. The existing sharp curve, located near the southeast corner of the parking garage, also would be replaced with a smoother curve. The reconfigured portion of the drive aisle would measure 26 feet wide. The planned site changes would improve on-site circulation.

## Truck Access and Circulation

### Loading Zones

According to the City of San Jose Downtown Zoning Regulations (Chapter 20.70), the project is required to provide two (2) freight loading spaces to serve the proposed office building (see requirement below).

- Offices with 100,000 s.f. - 175,000 s.f. of total gross floor area (GFA) shall provide one (1) loading space. One (1) additional loading space shall be included for each 100,000 s.f. of total GFA in excess of 175,000 s.f. (Section 20.70.420 – Professional Offices)

The ground level site plan (see Figure 4) shows one loading space located at the northeast corner of the new building. Though this is one less loading space than the City requirement, the proposed size of the new building is only about 19,000 s.f. greater than a building size that would require one loading space. In addition, the Planning Director may authorize a reduction in the number of on-site loading spaces in connection with the issuance of a development permit if the Director finds that the amount of loading spaces would be sufficient to accommodate circulation and manipulation of freight. The project applicant should coordinate with City staff to determine if one loading space would be adequate to serve the project.

### Truck Access and On-Site Circulation

Trucks would access the site via the signalized Julian Street driveway, follow the curve of the reconfigured drive aisle, and back into the loading space located at the northeast corner of the new office building. Analysis using standard turning templates shows that large trucks (SU-30 category) could adequately access the loading space. Trucks would exit the site via the western Bassett Street driveway.

### Garbage Collection

The site plan shows a trash enclosure with two bins situated along the drive aisle approximately midway between the new office building and the western Bassett Street driveway. Garbage trucks would have adequate access to the trash bins. Since the bins would be stored outside, adequate overhead clearance would be available to empty the dumpsters over the truck.

## Emergency Vehicle Access

Adequate emergency vehicle access would continue to be provided at the project driveways. The City of San Jose Fire Department requires that all portions of the buildings are within 150 feet of a fire department access road, and requires a minimum of six feet clearance from the property line along all sides of the building. All portions of the office building would be within 150 feet of a fire access road, and the project would meet the 6-foot requirement for building clearance on all sides.

## Pedestrian and Bicycle Access and Circulation

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.

## Pedestrian Facilities

Existing sidewalks along the project frontages on Julian Street and Bassett Street, as well as the Guadalupe River Trail (East), will continue to provide pedestrian access to and from the project site. The signalized crosswalk on W. Julian Street at the main project entrance provides direct access to the Guadalupe River trail system. Crosswalks with pedestrian signal heads and push buttons are provided at all of the signalized intersections in the vicinity of the project site.

Although sidewalks are missing on Bassett Street between Terraine Street and N. San Pedro Street, the overall network of sidewalks and crosswalks in the study area has good connectivity and will continue to provide pedestrians with safe routes to transit services and other points of interest in the downtown area.

## Crosswalks at Project Driveway on W. Julian Street

A pedestrian crosswalk at the signalized project driveway provides Guadalupe River trail users with a safe way to cross W. Julian Street. A crosswalk with pedestrian signal heads is also provided at the project driveway. While handicap ramps are provided at this intersection, the existing ramps are not designed to current City standards. City of San Jose staff have indicated that the project will be required to remove and replace the existing handicap ramps at the northwest and northeast corners of the signalized intersection to current City standards. Standard ADA compliant pavement markings with truncated domes and signage will need to be provided at the northeast and northwest corners of the intersection. Truncated domes are the current standard design requirement for detectable warnings which enable people with visual disabilities to determine the boundary between the sidewalk and the street.

## Bicycle Facilities

The only bicycle facility in the immediate vicinity of the project site is the Guadalupe River multi-use trail (Class I bikeway). However, the trail system offers many connections to other streets with bicycle facilities, both inside and outside the downtown area. The Guadalupe River trail is an 11-mile continuous Class I bikeway that runs through the City of San Jose from Curtner Avenue in the south to Alviso in the north. A direct connection to the trail system is provided on the project site via an entrance at the southwest corner of the parking structure.

According to the *San Jose Bike Plan 2020* map, future bicycle facilities are planned on Julian Street between The Alameda and Market Street. With the addition of future bike lanes on Julian Street, the availability of bicycle facilities in the study area will provide the project site with viable connections to transit services and

will provide for a balanced transportation system as outlined in the Envision 2040 General Plan Goals and Policies.

There are currently 16 Bike Share stations in downtown San Jose with two stations located less than 2,000 feet from the project site: one at the SAP Center and the other at San Pedro Square. The Diridon Station also has a bike share station and is located about  $\frac{3}{4}$  mile from the project site.

Bike racks would be located on the ground level next to the office building entrances. The site plan shows the bike racks would provide storage for a total of 24 bicycles. Sidewalks would surround the new building and would provide access to the bike racks. Additional bicycle parking (24 long-term spaces) would be provided within the existing parking structure.

## Transit Services

The project's close proximity to existing and planned major transit services will provide the opportunity for multi-modal travel to and from the project site. Thus, it is reasonable to assume that tenants of the proposed office building would utilize the transit services in the area. The City's General Plan identifies the transit commute mode split target as 20 percent or more for the year 2040. This level of transit mode share is attainable for a downtown office development project such as this, and is a reasonable goal for the project. It is estimated that the increased transit demand generated by the proposed project could be accommodated by the ridership capacities of the existing and future transit services in the study area. Existing and future transit services near the project site are described below.

### Existing Transit Services

The San Fernando LRT station is located approximately  $\frac{1}{2}$  mile walk of the project site, and is accessible via the Guadalupe River trail that runs adjacent to the project site. The St. James LRT station is located about  $\frac{1}{2}$  mile walk east of the project site via W. Julian Street/W. St. James Street. The San Jose Diridon Station, located approximately  $\frac{3}{4}$  mile walk from the project site, is situated along the Mountain View-Winchester LRT line and is served by Caltrain, ACE and Amtrak. The San Fernando LRT Station and Diridon Station can be easily accessed from the project site by taking the Guadalupe trail to San Fernando Street, which is a City-designated bike route.

### Future Transit Services

#### Bus Rapid Transit (BRT)

The Santa Clara/Alum Rock BRT project will provide a rapid bus service connecting East San Jose to the Downtown area using specialized vehicles and enhanced BRT stations. To support the improved bus service, the project includes a combination of dedicated bus lanes with median platforms along Alum Rock Avenue, shared bus lanes with curbside platform bulb outs along Santa Clara Street, and transit signal priority at all intersections within the system. A BRT stop will be provided on W. Santa Clara Street adjacent to the SAP Center. This end-of-the-line stop will be located within 2,000 feet of the new office building on the project site. BRT lines will provide service at each stop every 10 minutes during the weekday peak traffic periods. Passenger service is planned to begin in 2017.

Generally, two lanes in each direction of travel along Santa Clara Street and Alum Rock Avenue will be maintained during the BRT construction for peak traffic commute hours (6:00am – 9:00am and 3:00pm – 7:00pm). In addition, bus and LRT services will continue to operate during the construction phase. For these reasons, BRT construction activities are not expected to have a noticeable effect on traffic operations along W. Julian Street adjacent to the site during either the AM or PM peak hours of traffic.

#### 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 2025.

The Diridon BART Station would be located in the area of the Diridon Caltrain Station. The proposed Diridon BART Station would be located underground between Los Gatos Creek (to the east) and the Diridon Caltrain Station (to the west) and south of/parallel to West Santa Clara Street. The existing VTA bus transit center at the Diridon Station would be reconfigured for better access and circulation to accommodate projected bus and shuttle transfers to and from the BART station. A kiss-and-ride facility would be located at the Diridon Station along Cahill Street.

Access to the Diridon BART Station would be provided from W. Santa Clara Street at Cahill and Autumn Streets from the north. Access from the south would be provided via W. San Fernando Street. Street-level station entrance portals would provide pedestrian linkages to the Diridon Caltrain Station and SAP Center.

## Intersection Operations

The signalized intersections of River Corp Center/Julian Street, SR 87 NB Off-ramp/Julian Street and SR 87 SB Off-ramp/Julian Street were evaluated for turn pocket storage and vehicle queuing issues for the turning movements where the project would add a substantial amount of traffic. Queuing was evaluated for the AM and PM peak hours. Note that the nearby intersection of Autumn Street/Julian Street (located west of the project site) was not evaluated for queuing issues, since the project would add fewer than 5 peak hour vehicle trips to the turn pockets at this intersection.

### Queuing Analysis

Vehicle queues were estimated using the Poisson probability distribution method as follows: (1) the Poisson probability distribution was used to estimate the 95<sup>th</sup> percentile maximum number of queued vehicles per signal cycle for the turn movements; (2) the estimated maximum number of vehicles in the queue was translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length was compared to the existing or planned available storage capacity for the turn movements. This analysis thus provides a basis for estimating future turn pocket storage requirements.

The 95<sup>th</sup> percentile vehicle queue length value indicates that during the peak hour, a queue of this length or less would occur on 95 percent of the signal cycles. Or, a queue length larger than the 95<sup>th</sup> percentile queue would only occur on 5 percent of the signal cycles (about 3 cycles during the peak hour for a signal with a 60-second cycle length). Therefore, turn pocket designs based on the 95<sup>th</sup> percentile queue length would ensure that storage space would be exceeded only 5 percent of the time. The 95<sup>th</sup> percentile queue length is also known as the “design queue length.”

The queuing analysis indicates that the existing turn pocket storage at all three intersections are adequate to accommodate the maximum vehicle queues that currently occur, and would continue to provide adequate vehicle storage under project traffic conditions (see **Table 3**).

New count data for the intersection of River Corp Center/Julian Street are contained in **Appendix A**.

**Table 3  
Vehicle Queuing and Turn Pocket Storage Analysis**

Movement: Peak Hour Period:	River Corp Center & Julian St				SR 87 NB Off-Ramp & Julian St				SR 87 SB Off-Ramp & Julian St	
	SBL		WBR		NBL (off-ramp)		EBL		SBR (off-ramp)	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
<b>Existing</b>										
Cycle/Delay <sup>1</sup> (sec)	61	61	61	61	187	152	187	152	96	96
Volume (vphpl)	21	247	292	50	177	58	29	51	117	56
Avg. Queue (veh/ln.)	0.2	2.1	1.2	0.2	4.6	1.2	1.5	2.2	3.1	1.5
Avg. Queue <sup>2</sup> (ft./ln.)	4	52	31	5	115	31	38	205	78	37
95th % . Queue (veh/ln.)	1	5	3	1	8	3	4	5	6	4
95th % . Queue (ft./ln.)	25	125	75	25	200	75	100	125	150	100
Storage (ft./ ln.)	50	50	125	125	350	350	400	400	400	400
Adequate (Y/N)	Y	Y <sup>3</sup>	Y	Y	Y	Y	Y	Y	Y	Y
<b>Existing Plus Project</b>										
Cycle/Delay <sup>1</sup> (sec)	61	61	61	61	187	152	187	152	96	96
Volume (vphpl)	41	387	465	84	227	68	44	71	154	63
Avg. Queue (veh/ln.)	0.3	3.3	2.0	0.4	5.9	1.4	2.3	3.0	4.1	1.7
Avg. Queue <sup>2</sup> (ft./ln.)	9	82	49	9	147	36	57	75	103	42
95th % . Queue (veh/ln.)	1	6	4	2	10	4	5	6	8	4
95th % . Queue (ft./ln.)	25	150	100	50	250	100	125	150	200	100
Storage (ft./ ln.)	50	50	125	125	350	350	400	400	400	400
Adequate (Y/N)	Y	Y <sup>3</sup>	Y	Y	Y	Y	Y	Y	Y	Y
<b>Background</b>										
Cycle/Delay <sup>1</sup> (sec)	61	61	61	61	187	152	187	152	96	96
Volume (vphpl)	21	247	292	50	177	75	33	65	339	216
Avg. Queue (veh/ln.)	0.2	2.1	1.2	0.2	4.6	1.6	1.7	2.7	9.0	5.8
Avg. Queue <sup>2</sup> (ft./ln.)	4	52	31	5	115	40	43	69	226	144
95th % . Queue (veh/ln.)	1	5	3	1	8	4	4	6	14	10
95th % . Queue (ft./ln.)	25	125	75	25	200	100	100	150	350	250
Storage (ft./ ln.)	50	50	125	125	350	350	400	400	400	400
Adequate (Y/N)	Y	Y <sup>3</sup>	Y	Y	Y	Y	Y	Y	Y	Y
<b>Background Plus Project</b>										
Cycle/Delay <sup>1</sup> (sec)	61	61	61	61	187	152	187	152	96	96
Volume (vphpl)	41	387	465	84	227	85	48	85	376	223
Avg. Queue (veh/ln.)	0.3	3.3	2.0	0.4	5.9	1.8	2.5	3.6	10.0	5.9
Avg. Queue <sup>2</sup> (ft./ln.)	9	82	49	9	147	45	62	90	251	149
95th % . Queue (veh/ln.)	1	6	4	2	10	4	5	7	15	10
95th % . Queue (ft./ln.)	25	150	100	50	250	100	125	175	375	250
Storage (ft./ ln.)	50	50	125	125	350	350	400	400	400	400
Adequate (Y/N)	Y	Y <sup>3</sup>	Y	Y	Y	Y	Y	Y	Y	Y
<b>Notes:</b>										
<sup>1</sup> Vehicle queue calculations based on cycle length for signalized intersections.										
<sup>2</sup> Assumes 25 feet per vehicle queued.										
<sup>3</sup> The storage reported for this SB LT movement is the distance between W. Julian Street and the on-site 3-way stop-controlled intersection.										
Note that there is ample storage provided on-site for the SB LT vehicle queues that occur at this project driveway. Based on field observations, the maximum number of outbound vehicles that were queued on-site was never more than 5 vehicles.										

## Planned Roadway Improvements – Julian Street Realignment Project

The Julian Street realignment project will consist of the replacement of the existing S-shaped portion of Julian Street from N. Market Street to Notre Dame Street with a straight extension of Julian from N. Market Street to Terraine Street, forming a grid system roadway network. In the process, Julian Street and W. St. James Street will be converted into two-way streets west of N. Market Street. As part of the overall design, W. St. James Street will be widened and street parking removed where necessary to provide two eastbound lanes and two westbound lanes. Various improvements also would occur at the SR 87/Julian Street/Notre Dame Street, N Market Street/Julian Street, and N. Market Street/W. St. James Street intersections. Construction is currently underway. Note that the roadway conversion is not expected to change the circulation pattern of project-generated trips around the site.

### Construction Activities

Current construction activities related to the realignment project and the nearby residential tower project on St. James Street include lane and sidewalk closures along Julian Street and St. James Street east of the project site. Based on field observations, traffic continues to move adequately along these streets with the lane closures in effect. Pedestrian volumes along these segments of Julian Street and St. James Street are relatively low, and the sidewalk closures/pedestrian detours have very little effect on the overall pedestrian circulation in the area. There are no bike lanes along either Julian Street or St. James Street, so no bicycle facilities are affected.

The Julian Street Realignment Project and the nearby residential tower project are expected to be completed well before the proposed office building is constructed and occupied. Thus, all roadway improvements related to these projects also are expected to be completed.

### Parking Supply

The site plan shows there would be 1,524 parking stalls available to serve the entire River Corporate Center site. However, according to City of San Jose Planning staff, the site needs to provide parking at a rate of 1 parking stall per 250 square feet (rate for general office uses), or a total of 1,633 parking stalls to serve all three buildings on the site. Thus, the total amount of parking that is proposed to serve the site is 109 spaces short of the City's requirement.

The project is proposing to implement various parking reduction strategies as part of a comprehensive Transportation Demand Management (TDM) plan to address the parking deficit. The TDM plan is intended to allow for a reduction of at least 7 percent of the current City parking requirement. The TDM measures proposed by the project were developed based on the parking reduction requirements outlined in the San Jose Code of Ordinances. The TDM measures to be implemented by the project include the following:

- Bicycle parking will be provided per the City's Zoning Ordinance,
- Preferential parking with charging facilities for electric or alternatively-fueled vehicles will be provided on-site, and
- On-site showers and lockers will be provided.

The TDM plan that was prepared for the project includes detailed descriptions of each TDM measure. The complete TDM plan is included in **Appendix B** of this traffic report.

### Bicycle Parking

According to the City's Bicycle Parking Standards (Chapter 20.90, Table 20-190), the project is required to provide bicycle parking for the new building at a rate of one bicycle parking space for every 4,000 s.f. of office. This equates to 41 bicycle parking spaces based on a building size of 194,178 s.f. (FAR of 0.85).

The project is proposing 24 short-term bicycle spaces (bike racks) at the pedestrian entrances to the new building, and 24 secured long-term bicycle spaces within the reconfigured parking structure, for a total of 48 bicycle spaces. This exceeds the number of bicycle parking spaces required by the Zoning Code.

### **Definition of Long-Term and Short-Term Bicycle Parking**

Long-term bicycle parking facilities are secure bicycle storage facilities for tenants 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, guests or business patrons 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.

### **Motorcycle Parking**

According to the City's Motorcycle Parking Standards (Chapter 20.90, Table 20-250), the project should provide one motorcycle parking space for every 50 code-required vehicle space. Based on the new building size (194,178 s.f.) and applying the general office parking requirement, 660 parking spaces are needed to serve the new building. Thus, 13 motorcycle parking stalls are required to serve the new building.

According to the project applicant, the existing parking garage will be reconfigured in order to meet the City's requirement of 13 motorcycle parking spaces.

## 5. Conclusions

---

The site plan shows adequate site access and on-site circulation, and no operational issues would occur as a result of the project. Hexagon has provided the following recommendations resulting from the traffic study.

### Recommendations

- Coordinate with City staff to determine if one on-site freight loading spaces would be adequate to serve the project.
- City of San Jose staff have indicated that the project will be required to remove and replace the existing handicap ramps at the northwest and northeast corners of the signalized intersection of River Corporate Center/W. Julian Street to meet current City standards.
- The project will be required to implement a Transportation Demand Management (TDM) plan to address the small parking deficit. The TDM plan is intended to allow for a reduction of at least 7 percent of the current City parking requirement. The TDM Plan is contained in Appendix B.

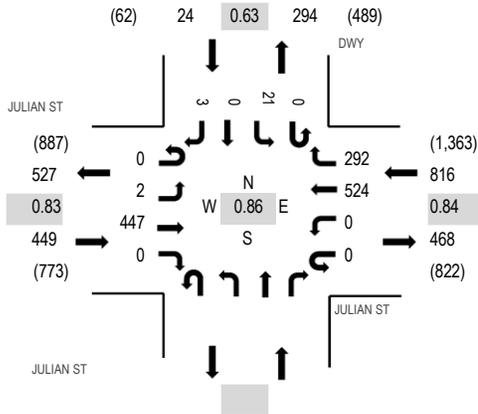
**Appendix A**  
**New Traffic Counts**



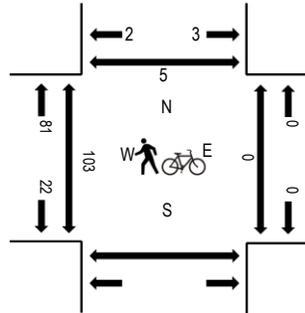
(303) 216-2439  
www.alltrafficdata.net

Location: 1 DWY & JULIAN ST AM  
Date and Start Time: Tuesday, May 24, 2016  
Peak Hour: 07:30 AM - 08:30 AM  
Peak 15-Minutes: 07:45 AM - 08:00 AM

**Peak Hour - All Vehicles**



**Peak Hour - Pedestrians/Bicycles in Crosswalk**



Note: Total study counts contained in parentheses.

**Traffic Counts**

Interval Start Time	JULIAN ST Eastbound				JULIAN ST Westbound				Northbound				DWY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	0	65	0	0	0	94	45					0	6	0	1	211	1,167	8	0	0	
7:15 AM	0	0	74	0	0	0	123	71					0	2	0	0	270	1,286	3	0	1	
7:30 AM	0	1	108	0	0	0	150	51					0	2	0	1	313	1,289	6	0	3	
7:45 AM	0	1	116	0	0	0	152	97					0	6	0	1	373	1,200	8	0	0	
8:00 AM	0	0	136	0	0	0	111	77					0	6	0	0	330	1,031	7	0	0	
8:15 AM	0	0	87	0	0	0	111	67					0	7	0	1	273		4	0	1	
8:30 AM	0	1	95	0	0	0	75	36					0	15	0	2	224		4	0	1	
8:45 AM	0	0	89	0	0	0	61	42					0	8	0	4	204		8	0	0	

**Peak Rolling Hour Flow Rates**

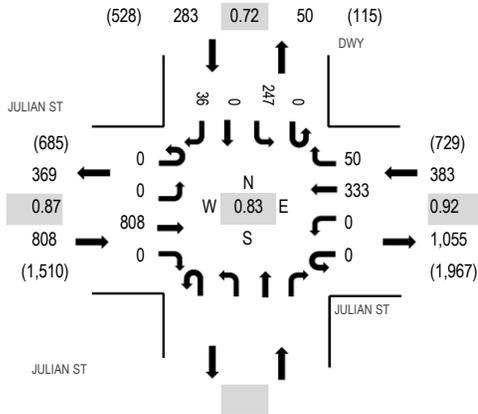
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	3	0	0	0	1	0					0	0	0	0	4
Bicycles on Road	0	0	0	0	0	0	1	0					0	0	0	0	1
Lights	0	2	427	0	0	0	510	291					0	21	0	3	1,254
Mediums	0	0	17	0	0	0	12	1					0	0	0	0	30
Total	0	2	447	0	0	0	524	292					0	21	0	3	1,289



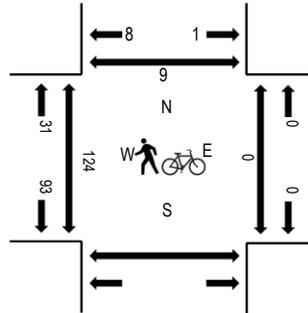
(303) 216-2439  
www.alltrafficdata.net

Location: 1 DWY & JULIAN ST PM  
Date and Start Time: Tuesday, May 24, 2016  
Peak Hour: 05:00 PM - 06:00 PM  
Peak 15-Minutes: 05:00 PM - 05:15 PM

**Peak Hour - All Vehicles**



**Peak Hour - Pedestrians/Bicycles in Crosswalk**



Note: Total study counts contained in parentheses.

**Traffic Counts**

Interval Start Time	JULIAN ST Eastbound				JULIAN ST Westbound				Northbound			DWY Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	3	198	0	0	0	0	70	16			0	43	0	6	336	1,293	14	0	4	
4:15 PM	0	0	160	0	0	0	0	64	15			0	32	0	3	274	1,400	9	0	7	
4:30 PM	1	0	170	0	0	0	0	83	19			0	82	0	17	372	1,466	11	0	0	
4:45 PM	0	0	170	0	0	0	0	67	12			0	57	0	5	311	1,469	4	0	1	
5:00 PM	0	0	217	0	0	0	0	91	13			0	107	0	15	443	1,474	9	0	0	
5:15 PM	0	0	172	0	0	0	0	85	14			0	61	0	8	340		10	0	1	
5:30 PM	0	0	233	0	0	0	0	77	10			0	48	0	7	375		10	0	0	
5:45 PM	0	0	186	0	0	0	0	80	13			0	31	0	6	316		7	0	1	

**Peak Rolling Hour Flow Rates**

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	1	0					0	0	0	0	1
Bicycles on Road	0	0	2	0	0	0	2	0					0	0	0	0	4
Lights	0	0	801	0	0	0	327	50					0	247	0	35	1,460
Mediums	0	0	5	0	0	0	3	0					0	0	0	1	9
Total	0	0	808	0	0	0	333	50					0	247	0	36	1,474

## **Appendix B**

### **TDM Plan**



# HEXAGON TRANSPORTATION CONSULTANTS, INC.

## Draft Transportation Demand Management (TDM) Plan

River Corporate Center Building 3 in San Jose, CA

Prepared for:

**The Sobrato Organization**

August 24, 2016



### Hexagon Transportation Consultants, Inc.

Hexagon Office: 4 North Second Street, Suite 400  
San Jose, CA 95113

Hexagon Job Number: 15BJ15

Phone: 408.971.6100

Client Name: The Sobrato Organization

Document Name: RCCBldg3\_TDMPlan\_24Aug2016

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Areawide Circulation Plans Corridor Studies Pavement Delineation Plans Traffic Handling Plans Impact Fees Interchange Analysis Parking  
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# 1.

## Introduction and Project Description

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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 purposes of TDM are to (1) reduce the amount of traffic 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 alternative 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 office development at 353 W. Julian Street in downtown San Jose, California, in order to propose effective and appropriate TDM measures based on the project's size, location and land use, to achieve a parking reduction of at least 7 percent for the entire site.

Given that the project proposes to provide less on-site parking than what is typically required for offices in San Jose, this TDM plan for the River Corporate Center Building 3 development (project) includes TDM measures designed to achieve at least a 7 percent parking reduction. The City of San Jose Planning Director may reduce the required number of parking spaces for a project by up to 50 percent, so long as (1) the reduction in parking will not adversely affect surrounding projects; (2) the reduction in parking will not rely upon or reduce the public parking supply; and (3) the project provides a detailed TDM plan and demonstrates that the TDM program can be maintained indefinitely.

### Project Description

The 12.92-acre project site is located on the northwesterly corner of Julian Street and SR 87 (see Figure 1). The site is currently occupied by two other office buildings as part of the Santa Clara County federal office building complex. The proposed project would construct a 194,178 square foot (s.f.) 6-story office building on an existing building foundation, situated between the two existing buildings, a parking garage, and the Guadalupe River Park Trail. Access to the site is provided via Julian Street and Bassett Street.

### 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. 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.

The project site is located about 2,500 feet from the San Fernando and St. James Light Rail Transit (LRT) stations, as well as nearly 20 bus routes. The site is also located about  $\frac{3}{4}$  mile from the existing Diridon Caltrain Station and future Diridon BART station location, is 2,000 feet from a planned Bus Rapid Transit (BRT) stop, and is situated immediately adjacent to the Guadalupe River multi-use trail system. An office development located within approximately a half-mile (or 20-minute walk) from a rail station that provides frequent and reliable transit services to a high percentage of regional destinations, such as the Diridon Station, can generally be considered a transit-oriented development (TOD). This project clearly could benefit from the nearby existing and future rail services.



LEGEND

- = Building 3 Location
- = Existing Buildings Near Building 3

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

## 2. Existing and Planned Transportation Facilities and Services

---

Transportation facilities and services that support sustainable modes of transportation include commuter rail, buses and shuttle buses, bicycle facilities, and pedestrian facilities. This chapter describes the existing and future transit services, as well as bicycle and pedestrian facilities, in the vicinity of the project site.

### Transit Services

The project's close proximity to existing and planned transit services will provide the opportunity for multi-modal travel to and from the project site. Thus, it is reasonable to assume that tenants of the proposed office building would utilize the transit services in the area. The City's General Plan identifies the transit commute mode split target as 20 percent or more for the year 2040. This level of transit mode share is attainable for a downtown office development project such as this, and is a reasonable goal for the project. Existing and future transit services near the project site are described below.

### Existing Transit Services

Existing transit services in the project vicinity are provided by the Santa Clara Valley Transportation Authority (VTA), Caltrain, Altamont Commuter Express (ACE), and Amtrak and are described below. The transit stations and local VTA bus lines near the project site are described below.

#### VTA Bus Service

The downtown area is served directly by many local buses. The bus lines that operate within ½ mile of the project site are listed in **Table 1**, including route description and commute hour headways.

In addition to the adjacent bus routes, the VTA also provides a free shuttle service within the downtown area. The downtown area shuttle (DASH) provides free shuttle service from the San Jose Diridon station to San Jose State University, and the Paseo De San Antonio and Convention Center LRT stations via San Fernando and San Carlos Streets. The closest stop for DASH (Route 201) is located about ½ mile south of the project site on W. San Fernando Street, and is accessible via the Guadalupe River multi-use trail.



**Table 1**  
**Existing VTA Bus Service Within ½ Mile of the Project Site**

Bus Route	Route Description	Headway <sup>1</sup>
Local Route 17	Gilroy Transit Center to Monterey & Tomkins	45 min
Local Route 22	Palo Alto Transit Center to Eastridge Transit Center	10-15 min
Local Route 55	DeAnza College to Great America	15-20 min
Local Route 63	Almaden Exp/Camden Av to Diridon Station & SJSU	30 min
Local Route 64	Almaden LRT Station to McKee Rd/ White Rd	15 min
Local Route 65	Kooser/Blossom Hill to Diridon Station & 13th/Hedding	45 min
Local Route 66	Kaiser San Jose Medical Center to Dixon Landing Road (Milpitas)	15 min
Local Route 68	Gilroy Transit Center to San Jose Diridon Station	15-20 min
Local Route 72	Senter Rd/Monterey Rd to Downtown San Jose	15 min
Local Route 73	Snell Av/Capitol Exp to Downtown San Jose	15 min
Local Route 81	SJSU to Moffett Field/AMES Center	25-35 min
Local Route 82	Westgate Mall to Downtown San Jose	30 min
Express Route 168	Gilroy Transit Center to San Jose Diridon Station	30 min
Express Route 181	Fremont BART Station to Diridon Station	15 min
Express Route 201	Downtown Area Shuttle (DASH)	4-14 min
Limited Stop Bus 304	South San Jose to Sunnyvale Transit Center	25-45 min
Limited Stop Bus 323	Downtown San Jose to DeAnza College	15 min
Rapid 522	Palo Alto Transit Center to Eastridge Transit Center	15 min

Notes:  
<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 Mountain View-Winchester (Route 902) and Santa Teresa-Alum Rock (Route 901) LRT lines operate within ½ mile of the project site. The San Fernando LRT station is located approximately ½ mile walk south of the site and is easily accessible via the Guadalupe River trail. The St. James LRT station is located about ½ mile walk east of the project site via Julian Street/St. James Street.



**San Jose Diridon Station**



The San Jose Diridon Station, located approximately ¼ mile walk from the project site, is situated along the Mountain View-Winchester LRT line and is served by Caltrain, ACE and Amtrak. The Diridon Station provides bike racks and bike lockers. The Diridon Station can be easily accessed from the project site by taking the Guadalupe River multi-use trail to San Fernando Street, which is a City-designated bike route.

**Caltrain Service**

Commuter rail service between San Francisco and Gilroy is provided by Caltrain, which currently operates 91 weekday trains that carry approximately 58,500 riders on an average weekday. Trains stop frequently at the Diridon station between 4:30 AM and 10:30 PM in the northbound direction, and between 6:28 AM and 1:34 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 (ACE) Service**

The Altamont Commuter Express (ACE) provides commuter passenger train service across the Altamont between Stockton and San Jose during the weekdays. ACE stops at the San Jose Diridon station four times during both the morning and evening weekday commute hours. ACE trains stop at the Diridon station four times between 6:32 AM and 9:17 AM in the westbound direction, and four times 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 eight times on weekdays between 7:38 AM and 11:55 PM in the westbound direction.

## Future Transit Services

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

### **Bus Rapid Transit (BRT)**

The Santa Clara/Alum Rock BRT project will provide a rapid bus service connecting East San Jose to the Downtown area using specialized vehicles and enhanced BRT stations. To support the improved bus service, the project includes a combination of dedicated bus lanes with median platforms along Alum Rock Avenue, shared bus lanes with curbside platform bulb outs along Santa Clara Street, and transit signal priority at all intersections within the system. A BRT stop will be provided on W. Santa Clara Street adjacent to the SAP Center. This end-of-the-line stop will be located within 2,000 feet of the new office building on the project site. BRT lines will provide service at each stop every 10 minutes during the weekday peak traffic periods. Passenger service is planned to begin in 2017.



### **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 2025.

The Diridon BART Station would be located in the area of the Diridon Caltrain Station. The proposed Diridon BART Station would be located underground between Los Gatos Creek (to the east) and the Diridon Caltrain Station (to the west) and south of/parallel to West Santa Clara Street. The existing VTA bus transit center at the Diridon Station would be reconfigured for better access and circulation to accommodate projected bus and shuttle transfers to and from the BART station. A kiss-and-ride facility would be located at the Diridon Station along Cahill Street.

Access to the Diridon BART Station would be provided from W. Santa Clara Street at Cahill and Autumn Streets from the north. Access from the south would be provided via W. San Fernando Street. Street-level station entrance portals would provide pedestrian linkages to the Diridon Caltrain Station and SAP Center.



## Pedestrian and Bicycle 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 and Future Bicycle Facilities**

The project site is situated adjacent to the Guadalupe River multi-use trail (Class I bikeway). The trail 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 trail system offers many connections to other streets with bicycle facilities, both inside and outside the downtown area. The Guadalupe River trail is an 11-mile continuous Class I bikeway from Curtner Avenue in the south to Alviso in the north. A direct connection to the trail is provided on the project site via an entrance at the southwest corner of the parking structure. The trail can also be accessed via the signalized intersection on Julian Street (southern entrance to the project site).



According to the *San Jose Bike Plan 2020* map, future bicycle facilities are planned on Julian Street between The Alameda and Market Street. With the addition of future bike lanes on Julian Street, the availability of bicycle facilities in the study area will provide the project site with viable connections to transit services and will provide for a balanced transportation system as outlined in the Envision 2040 General Plan Goals and Policies.

The City of San Jose participates in the Bay Area Bike Share program, which allows users to rent and return bicycles at various locations around the downtown area. There are currently 16 Bike Share stations in downtown San Jose with two stations located less than 2,000 feet from the project site: one at the SAP Center and the other at San Pedro Square. The Diridon Station also has a bike share station and is located about ¾ mile from the project site.

**Bicycle Parking**

According to the project site plan, bike racks would be located on the ground level next to the office building entrances. The site plan shows the bike racks would provide storage for a total of 24 bicycles. Sidewalks would surround the new building and would provide access to the bike racks. Additional bicycle parking (24 secured long-term spaces) would be provided within the existing parking structure.



**Existing Pedestrian Facilities**

Existing sidewalks along the project frontages on Julian Street and Bassett Street, as well as the Guadalupe River Trail (East), provide pedestrian access to and from the project site. The signalized crosswalk on Julian Street at the main project entrance provides direct access to the Guadalupe River trail system. Crosswalks with pedestrian signal heads and push buttons are provided at all of the signalized intersections in the vicinity of the project site.

The overall network of sidewalks and crosswalks in the study area has good connectivity and provides pedestrians with safe routes to transit services and other points of interest in the downtown area.

### 3. TDM Plan

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This chapter describes TDM measures to be implemented for the 353 W. Julian Street office project, which include services that promote sustainable modes of transportation. The TDM measures were developed specifically to reduce employees' vehicle parking demand. The goal of this TDM Plan is to reduce the parking demand for the entire site by at least 7 percent, in accordance with the City of San Jose Parking Code.

The TDM measures proposed by the project were developed based on the parking reduction requirements outlined in the San Jose Code of Ordinances, and were geared toward addressing the project's small parking deficit of only 7 percent. The City may grant a parking reduction of up to 50 percent with implementation of a comprehensive TDM plan.

#### Compliance with the City Parking Code

Due to the project's downtown location and proximity to transit options and bicycle facilities, it is reasonable to assume that not all future employees of the office development would require a parking space. Implementation of the proposed TDM measures would encourage both existing and future employees to utilize alternative transportation modes available in the area to reduce single occupancy vehicle trips and parking demand generated by the project.

#### Proximity to Transit

The project site is located within the Downtown Core and is located within a 2,000-foot walk from where a Bus Rapid Transit (BRT) stop will be located. The BRT stop will be located on Santa Clara Street adjacent to the SAP Center. In addition, the project site is located approximately 2,500 feet from the San Fernando and St. James LRT stations, as well as nearly 20 local bus routes, and is located about  $\frac{3}{4}$  mile from the existing Diridon Caltrain Station and future Diridon BART Station location.

#### Bicycle Parking Requirement

In accordance with the City's Bicycle Parking Standards (Chapter 20.90, Table 20-190), the project is required to provide one bicycle parking space for every 4,000 s.f. of office. This equates to a total of 41 bicycle parking spaces. The project is proposing to provide 48 (24 short-term and 24 long-term) bicycle parking spaces. This exceeds the number of bicycle parking spaces required by the Zoning Code.

#### Vehicle Parking Requirement

According to the City of San Jose Downtown Zoning Regulations (Chapter 20.70, Table 20-140), the project is required to provide four off-street parking space per 1,000 square feet of office space. Given that the new office building is part of a larger office complex and parking is to be shared between all three buildings on-site, the City

requires a total of 1,633 parking spaces to serve the entire site based on 480,388 s.f. and an F.A.R. of 0.85. The site plan shows there would be 1,524 parking stalls available to serve the entire River Corporate Center site, which represents a deficit of 109 parking spaces.

The project is proposing to implement various parking reduction strategies as part of a Transportation Demand Management (TDM) plan to address the parking deficit. The TDM plan is intended to allow for a reduction of at least 7 percent of the current City parking requirement.

## Proposed TDM Measures

The TDM measures to be implemented by the project include planning and design measures related to the attributes of the site location, the site design, and on-site amenities. Such measures encourage walking, biking, use of transit, and internalization of trips. These measures are described in the following section based on the TDM measures specified in the San Jose Code of Ordinances.

### Bicycle Facilities

The project will provide adequate bicycle parking per the City of San Jose Parking Code. Short-term and long-term bike parking will be included and will provide safe storage for employees' bicycles. Bike racks will be located on the ground level next to the office building entrances. The site plan shows the bike racks would provide storage for a total of 24 bicycles. Sidewalks would surround the new building and would provide access to the bike racks. Additional bicycle parking (24 secured long-term spaces) would be provided within the existing parking structure.

By offering accessible and safe storage, nearby employees can commute by bicycle. Additionally, each tenant will be given the option whether to allow future employees to bring their bikes into the building and store the bicycles at their cubical or office area. Both options encourage employees to bike to work knowing they will be able to safely store their bicycle.



### Bay Area Bike Share Program

The Bay Area Bike Share Program is a network of unique commuter-style bikes that can be checked out from and returned to self-service bike share stations for short trips. The idea behind bike sharing is to make bikes available to transit users for the short journey between a transit station and the workplace. They also are available to transit users and carpoolers in the same way as car sharing vehicles for making a business or personal trip during the day.

Future tenants may wish to provide their full time employees with a free Bay Area Bike Share membership. There are currently 16 Bike Share stations in downtown San Jose with two stations located less than 2,000 feet from the project site: one at the SAP Center and the other at San Pedro Square. The Diridon Station also has a bike share station and is located about ¾ mile from the project site.



## On-site Showers and Lockers

The project will include on-site shower facilities with lockers to serve all office tenants, existing and future. Shower facilities encourage employees to utilize multi-modal travel in order to incorporate fitness into their daily routines. This approach is consistent with the goals of the City's General Plan, which aim to encourage the use of non-automobile transportation modes to achieve San Jose's mobility goals and reduce vehicle trip generation and vehicle miles traveled.

Providing showers enables active commuters to arrive early and prepare for the day without hygienic concerns. According to LEED standards, shower and changing facilities should be provided for 0.5 percent of full-time equivalent employees. Based on this standard, we estimate that eight unisex showers would be adequate to serve all three office buildings on the project site. This estimate assumes 480,388 s.f. (total of all three buildings), an F.A.R. of 0.85, and 250 SF per employee. Note that if some showers already exist on site, then the number of existing showers may be subtracted from this total.



## Preferential Parking

On-site amenities can be beneficial in reducing vehicle trips and emissions by offering common needs on-site, such as preferential parking. The project is proposing to provide preferential parking with electric vehicle charging stations. The charging stations will have designated spaces near the entrance in the adjacent parking area. Electric vehicle charging stations within office developments allow employees to charge their cars while working. Combined with the preferential parking, this initiative encourages employees to rideshare by making it more convenient for alternative-fuel users, and reduces the demand for parking. The availability of electric charging stations at their place of work also enables employees to become prospective electric vehicle buyers.



## 4. TDM Implementation and Monitoring

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As previously stated, the primary purpose of the TDM plan is to reduce the project parking demand by at least 7 percent. Per 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 will submit this TDM plan to the City of San Jose and will be responsible for ensuring that the TDM elements are incorporated into the project. After the development is constructed and office space is leased, the property/building manager will identify an Employee Transportation Coordinator (ETC) as a point of contact for the TDM plan. If the ETC changes for any reason, the City and tenants will be notified of the name and contact information of the new designated ETC.

The ETC will ensure that the bicycle facilities, on-site showers and lockers, and preferential parking with EV charging stations will remain in place for the life of the project. All three elements of the TDM plan must also be properly maintained for the life of the project.

### Monitoring

The TDM Plan will be evaluated annually to ensure that adequate parking continues to be provided on-site for all three office buildings. It is recommended that the designated ETC consult with City staff to ensure the monitoring and reporting meets the City's expectations. Monitoring should include the following components:

- Annual Vehicle Parking Counts
- Annual Employee Mode Share Survey

### Annual Vehicle Parking Counts

Annual parking counts will be conducted by a third party on a typical weekday (Tuesday, Wednesday, or Thursday). Counts of the number of parked vehicles and vacant spaces will be conducted between 10:00 AM - 2:00 PM. The goal of the TDM Plan is to avoid parking spillover. Thus, if the counts show that parking spaces are less than fully occupied, it can be assumed that all parking demand is being accommodated on site, and the TDM Plan is effective. If parking spaces are 100% occupied, or nearly so, then spillover may be happening and the TDM Plan will need to be enhanced.

## Annual Employee Mode Share Survey

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

## Annual Reports

The property manager will 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 employee mode share surveys, including the reduction in parking demand.
- Effectiveness of individual program components from the annual employee mode share survey.
- A description of the TDM programs and services that are currently offered to employees/tenants.