Hexagon Transportation Consultants, Inc.

Memorandum

Date: December 23, 2024

To: Manjit Banwait, City of San Jose

From: Robert Del Rio, T.E.

Subject: Supplemental Traffic Evaluation for the Gateway Tower Residential Development

This memo presents a supplemental evaluation of consistency with the completed Local Transportation Analysis (LTA) for the proposed Gateway Tower residential development project description adjustments. An LTA report dated February 18, 2016 was completed for the following approved project:

- 25-story, 308 apartment units
- 5,135 square feet of retail space
- 254 on-site parking stalls

The new project description proposes a decrease in project size to 220 units that will be 100% affordable and 3,750 square feet of ground floor retail/commercial space (15-story building). A total of 89 parking spaces would be provided on-site. Based on the revised site plan dated December 09, 2024, parking garage access will be provided along South Market Street in the same vicinity as the previous plan.

The purpose of this supplemental traffic analysis is to determine whether the change in project description and updated site plan would affect the results of the February 18, 2016 Traffic Operations Study. The supplemental evaluation consists of a comparison of estimated trip generation for the approved and new project description. In addition, a review of the revised site plan also was completed.

Revised Trip Generation

Baseline (or gross) vehicle-trips were estimated by using average vehicle-trip rates from the *ITE Trip Generation Manual, 11th Edition* for the Multifamily Housing (High-Rise) land use (Land Use 222). Although the project site is within ½-mile of rail transit (Paseo de San Antonio LRT Station), trip generation rates for the "Not Close to Rail Transit" land use subcategory were selected since multimodal trip reductions are already accounted for as part of the location-based adjustment, as described below. 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

Residential / Retail Internal Capture

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

Location-Based Adjustment

The location-based adjustment reflects the project's vehicle mode share based on the place type in which the project is located per the San Jose Travel Demand Model. The project's place type was obtained from the *San Jose VMT Evaluation Tool.* Based on the VMT Tool, the project site is located within a central city urban area. Therefore, the baseline project trips were adjusted to reflect a "Urban High-Transit" mode share. Urban high-transit areas are characterized as areas with high density, good accessibility, high public transit access, low single-family homes, and middle-aged and older housing stock. Residential uses within urban high-transit areas have a vehicle mode share of 78 percent. Thus, a 22 percent reduction was applied to the baseline trips estimated to be generated by the proposed residential units.

VMT Reduction

A VMT reduction was applied to the trip generation estimates based on the VMT per capita estimate obtained from the San Jose VMT Evaluation Tool. Based on the San Jose VMT Evaluation Tool, the project is anticipated to generate 6.99 VMT per-capita in an area that currently generates approximately 7.22 VMT per-capita. It is assumed that every percent reduction from the existing per-capita VMT is equivalent to one percent reduction in peak-hour vehicle trips. Thus, the project trip estimates were reduced by 3.19 percent to reflect the reduction in peak hour trips.

Project Trip Estimates and Comparison to Previous Project Description

Based on the trip generation estimates contained in the 2016 Traffic Operations Study, the originally proposed project would generate 152 net trips (52 inbound and 100 outbound) during the AM peak hour and 133 net trips (87 inbound and 46 outbound) during the PM peak hour. The revised trip generation estimates based on the updated project description (see Table 1) show the new project would generate 51 net trips (18 inbound and 31 outbound) during the AM peak hour and 66 net trips (37 inbound and 30 outbound) during the PM peak hour. Thus, the trip generation comparison indicates that the proposed change in project description will result in a decrease of 101 AM peak-hour trips and 67 PM peak-hour trips when compared to the previously approved project. The revised project description also would result in a reduction from 1491 to 875 daily trips generated by the project site.

The decrease in AM and PM peak hour trips as a result of the decrease in project size will result in approximately 50% less trips during each of the peak hours. Thus, the new proposed project would not result in any greater impact to the transportation system than that identified in the February 18, 2016 Traffic Operations Study for the approved project.

US 101/Oakland/Mabury Transportation Development Policy (TDP) Traffic Impact Fee

At the request of City staff an evaluation of the addition of project trips to the US 101/Oakland/Mabury Transportation Development Policy (TDP) intersections and required fee payment was reviewed. The TDP traffic impact fee (TIF) is calculated based on the number of PM peak hour vehicle trips a project contributes to the policy interchange intersections, which include:

- Oakland Road/US 101 (South)
- Oakland Road/US 101 (North)
- Mabury Road/US 101 (East)
- Mabury Road/US 101 (West)
- Oakland Road/Commercial Street

The current TDP fee, effective January 1, 2024, is $49,487 per PM peak hour vehicle trip added to the policy interchange intersections. Projects contributing traffic to these intersections are required

to pay this fee. According to the policy, each trip traversing one or more policy interchange intersections during the PM peak hour is counted as a single interchange trip, regardless of the number of intersections traversed.

The TDP intersections are located approximately five miles from the project site. The proposed project will generate less peak hour trips than the previously approved project on the site and will generate maximum of 66 PM peak hour trips. The proposed project is not expected to add a measurable number of trips to the TDP intersections when considering the small number of PM peak hour trips and distance from the TDP intersections.

Site Access Design

The revised site plan dated December 9, 2024 (Figure 3) indicates garage access to the project will remain along South Market Street. The site plan shows a proposed driveway width of 26 feet, which will conform with the recommended maximum width of 26 feet for driveways within the Downtown area (*San Jose Downtown Design Guidelines and Standards* 5.5.2). The revised site plan does not indicate a gate will be included at the garage entrance, however, if a gate should be included, the City of San Jose minimum inbound storage requirements of two vehicles (50 feet) should be met.

Project Driveway Operations

Based on the estimated project trips, it is projected that a maximum of 19 and 39 inbound trips (during the AM peak-hour and PM peak-hours, respectively) would enter the parking garage. City of San Jose staff have indicated that while left turns into the project driveway on Market Street would be allowed, left turns out of the project driveway would not be permitted. The City has not indicated, however, how the outbound left-turn restriction would be enforced.

Recommendation: Installation of “right-turn only” signs at the garage exit as a minimum traffic control measure. In addition, curbing at the driveway exit may be required to physically restrict left-turns from the driveway.

There are existing trees on the project frontage along Market Street adjacent to the project driveway that may obscure sight distance at the project driveway. In addition, existing street parking is present along northbound Market Street in the vicinity of the proposed driveway. It is recommended that new red curb be installed equal to a car length south of the project driveway to ensure exiting vehicles will have clear vision of vehicles and bicyclists traveling northbound along Marke Street.

Recommendation: Red curb equal to a minimum of one car length south of the proposed driveway along Market Street should be implemented to provide adequate sight distance.

Recommendation: Installation of visible and audible warning signals should be provided to alert pedestrians and bicyclists to vehicles existing the driveway.

On-site Circulation

The revised site plan dated December 2024 indicates access to all five parking levels (one at grade and 4 above grade) would be provided via the singular driveway on Market Street. The project would provide 90-degree parking stalls within the parking garage. All drive aisles will need to meet the City’s minimum width of 24 feet for two-way drive aisles. The site plan indicates that proposed drive aisle widths would meet City standards.

Recommendation: The applicant should work with City staff to approve drive aisle widths that are narrower than the City's requirements. Convex mirrors should be placed at appropriate locations (blind turns) on all levels of the parking garage

Pedestrian and Bicycle Access and Circulation

Pedestrian Circulation

Pedestrian facilities in the project area consist mostly of sidewalks along all of the surrounding streets, including the project frontages along Market Street and First Street. The project will be required to provide 15-foot attached sidewalks with tree wells along its frontages on Market Street, William Street and First Street. Crosswalks are provided at the following locations along the project frontages:

- All four legs of the First Street and William Street intersection.
- The south, east, and west approaches of the Market Street and William Street intersection with a Rectangular Rapid Flashing Beacons (RRFB) and enhanced signage provided on the south approach.
- Crosswalks and pedestrian signal heads also are available at the intersection of Market Street and Balbach Street. Existing ADA ramps are provided at all corners of the intersection.

Multi-Modal Improvements

The City is proposing multi-modal safety improvements at the intersection of First Street and William Street, located at the southeast corner of the project site. The improvements at this intersection consist of bulb-outs with ADA ramps at all corners of the intersection. The intersection improvement will improve the safety and accessibility of pedestrians at the intersection and immediate project area. The project will be required to construct the bulb-outs and ADA ramps at the northwest and southwest corners of the intersection of William Street and First Street.

Parking and TDM Requirements

According to the updated site plan, the project proposes a total of 89 on-site parking stalls on 5 levels.

The City of San Jose recently amended Title 20 of the Municipal Code to remove citywide minimum off-street vehicle parking requirements for developments. The changes are intended to encourage the use of alternative modes of transportation, thereby reducing VMT and greenhouse gas emissions. All projects requiring a development permit that are not exempt per Section 20.90.900.B of the San Jose Municipal Code are required to adhere to the new parking ordinance which includes new mandatory TDM requirements.

However, the project meets the TDM screening criteria by providing 100% restricted affordable units. Additionally, the project achieves a minimum density of 35 dwelling units per acre (DU/AC) and is located within a High-Quality Transit Area, further supporting the City's goals of reducing VMT and encouraging sustainable, transit-oriented development. Thus, no TDM plan is required for the project.

Off-Street Loading

Based on the City of San Jose off-street loading standards within the Downtown Area (20.70.430 and 20.70.435), residential uses of greater than two hundred units and less than five hundred units are required

to provide at least two off-street loading spaces. Retail and commercial stores and shops less than 10,000 gross floor area (GFA) are not required to provide an off-street loading space.

The mixed-use project includes a total of 308 residential units and 5,135 square feet of retail space. Therefore, the project is required to provide two off-street loading spaces for the residential units. Off-street loading is not required for the proposed retail space. The project does not propose off-street loading areas.

Per section 20.70.450 of the Downtown Zoning Regulations, the Planning Director may reduce the number of off-street loading spaces based on the available loading space within the public right-of-way. There currently is an approximately 50-foot on-street freight loading on the site's frontage on First Street that will be maintained. The project frontage currently has metered parking along Market Street, First Street, and William Street. An additional on-street loading zone could be provided along Market Street with the removal of two metered parking spaces on the project frontage. The project should coordinate with city staff to determine whether the current off-street loading space on First Street is sufficient and whether a second space should be provided on Market Street.

Recommendation: The project should coordinate with city staff to determine the number of off-street loading spaces the project should provide.

Table 1
Trip Generation Estimates

	Reduction	VMT			Daily		AM Peak Hour						PM Peak Hour					
								Split		Trip				Split		Trip		
Land Use	%	lace Typ	Existing	Project	Size	Rate	Trip	Rate	In	Out	In	Out	Total	Rate	In	Out	In	Out	Total
Proposed Land Uses																			
#222 - Multifamily Housing (High-Rise)					220 DU	4.54	999	0.27	34%	66%	20	39	59	0.32	56%	44%	39	31	70
Residential/Retail Internal Capture [1]	*15%*						*(31)*				*(1)*	*(1)*	*(1)*				*(2)*	*(2)*	*(4)*
Location-Based Reduction [2]	*22%*	Urban High-Transit					*(213)*				*(4)*	*(8)*	*(13)*				*(8)*	*(6)*	*(15)*
VMT-Based Reduction [3]	*3.19%*		7.22	6.99			*(24)*				*0*	*(1)*	*(1)*				*(1)*	*(1)*	*(2)*
#822 - Strip Retail Plaza (<40k)					3,750 SF	54.45	204	2.36	60%	40%	5	4	9	6.59	50%	50%	13	12	25
Residential/Retail Internal Capture [1]	*15%*						*(31)*				*(1)*	*(1)*	*(1)*				*(2)*	*(2)*	*(4)*
Location-Based Reduction [1]	*17%*	Urban High-Transit					*(29)*				*(1)*	*(1)*	*(1)*				*(2)*	*(2)*	*(4)*
Total Proposed Project Trips							**875**				**18**	**31**	**51**				**37**	**30**	**66**
Approved Project Trips																			
Residential and Retail Approved Project [4]							1,491				52	100	152				87	46	133
Net Project Trips							**(616)**				**(34)**	**(69)**	**(101)**				**(50)**	**(16)**	**(67)**

Source: ITE Trip Generation Manual, 11th Edition 2021.

[1] Residential/retail internal trip reductions were applied to the project per the 2014 Santa Clara VTA TIA Guidelines.

[2] The place type (Suburban with Multi-Family Homes Place Type) for the project site is obtained from the City of San Jose VMT Evaluation Tool (December 10, 2024). The location-based vehicle mode shares are obtained from Table 6 of the City of San Jose Transportation Analysis Handbook (April 2020). The trip reductions are based on the percent of mode share for all of the other modes of travel beside vehicle.

[3] 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.

[4] Source: *470 S. Market Street Residential Traffic Operation Study*, Feburary 18, 2016

Figure 3
Ground Floor Site Plan

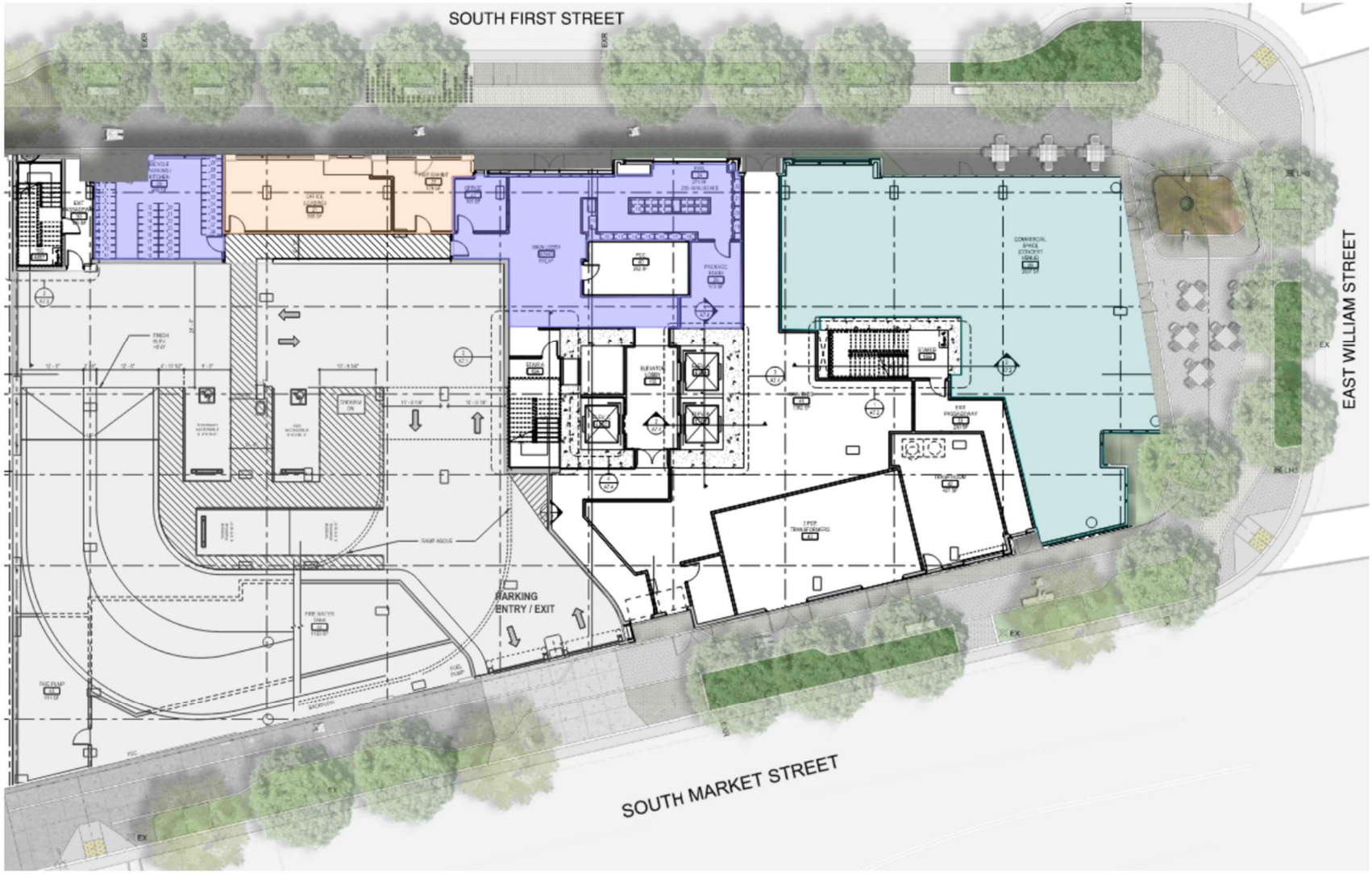

Figure 3
Planned First Street & William Street Multi-Modal Improvements