Appendix G

Preliminary Traffic Analysis

RKH
Civil and Transportation Engineering

PRELIMINARY TRAFFIC ANALYSIS
90 ROOM HOTEL
1090 S. DE ANZA BOULEVARD
SAN JOSE, CALIFORNIA

October 14, 2016

Prepared for -

Cupertino De Anza Hospitality LLC

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PRELIMINARY TRAFFIC ANALYSIS
90 ROOM HOTEL
1090 S. DE ANZA BOULEVARD
SAN JOSE, CALIFORNIA

PROJECT DESCRIPTION

The 90-room hotel is to be located on the site of a presently operating service station and car wash facility on the northeast corner of the intersection of S. De Anza Boulevard and Via Vico in the city of San Jose. See Location Map, Figure 1, page 2.

VEHICLE TRIP GENERATION

The estimated vehicle trip generation for the project is shown in Table A below. Because the site is presently occupied by an active facility, the net change in vehicle trip generation from the present use to the proposed use has to be considered. A detailed trip generation table is provided in the Appendix.

Table A: Project Vehicle Trip Generation

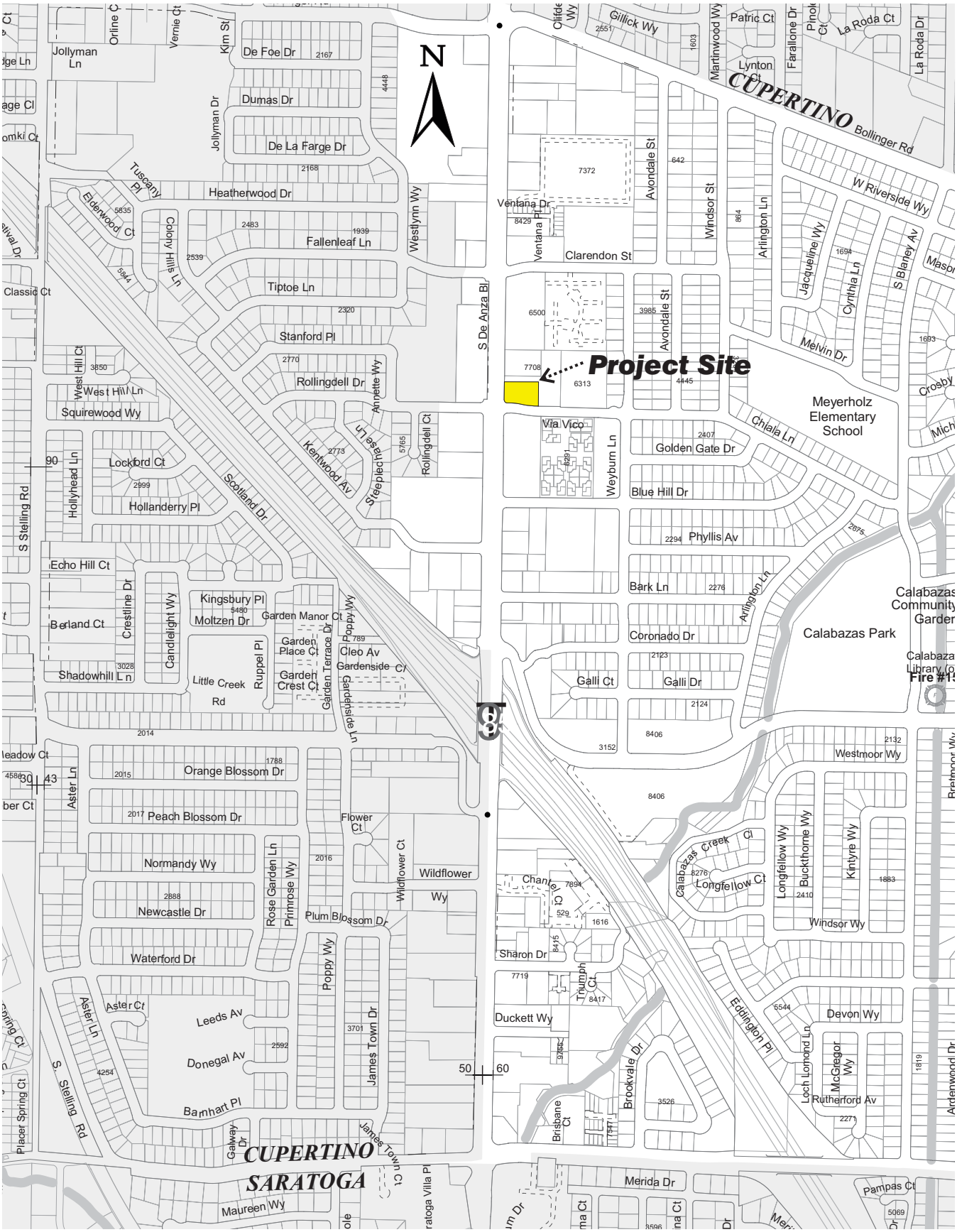
Land Use	Size	LU Code	Units	AM Street Peak Hour			PM Street Peak Hour		
				In	Out	Total	In	Out	Total
Hotel	90	310	RM	23	17	40	31	32	63
Less Service Station Primary Trip Ends	-8	946	VFP	-18	-18	-36	-25	-24	-49
Net Change in Peak Hour Traffic:				5	-1	4	6	8	14

Source: ITE Trip Generation 9th Edition ©2012

The proposed 90-room hotel will generate a few primary vehicle trip ends more during the peak traffic hours of the day than does the current use. The project will have negligible impact on traffic on the surrounding street system.

PEAK HOUR SIGNAL WARRANTS

A traffic count of the intersection of S. DeAnza Boulevard & Via vico/Rollindell Drive was made on Tuesday, October 11, 2016, for the time period of 4:00 to 6:00 p.m. The peak hour was found to be from 5:00 to 6:00 p.m. Using the criteria in the 2014 California Manual on Uniform Traffic Control Devices, Chapter 4C, a peak hour signal warrant analysis was conducted. The



LOCATION MAP
FIGURE 1

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warrant analysis determined that the intersection does not meet the peak hour criteria for signalization. The warrant analysis worksheets are provided in the Appendix.

PEDESTRIAN AND BIKE FACILITIES

The site is situated on S. De Anza Boulevard. That street, and all the surrounding streets, have sidewalks. Figure 2, Bike Facilities Map, page 4, shows the streets in the area surrounding the site that have Class II bike lanes. The impact the project may have on the bike lanes will be negligible. It is estimated that the hotel will employ approximately 19 people, 11 of which would likely work the day shift, five work the swing shift, and three work the night shift. If 10% of the employees rode a bike to work, that would mean one, possible two persons, might be riding during the peak traffic hours of the day. That number of bikers would certainly not tax the capacity of the bike lanes on S. De Anza Boulevard.

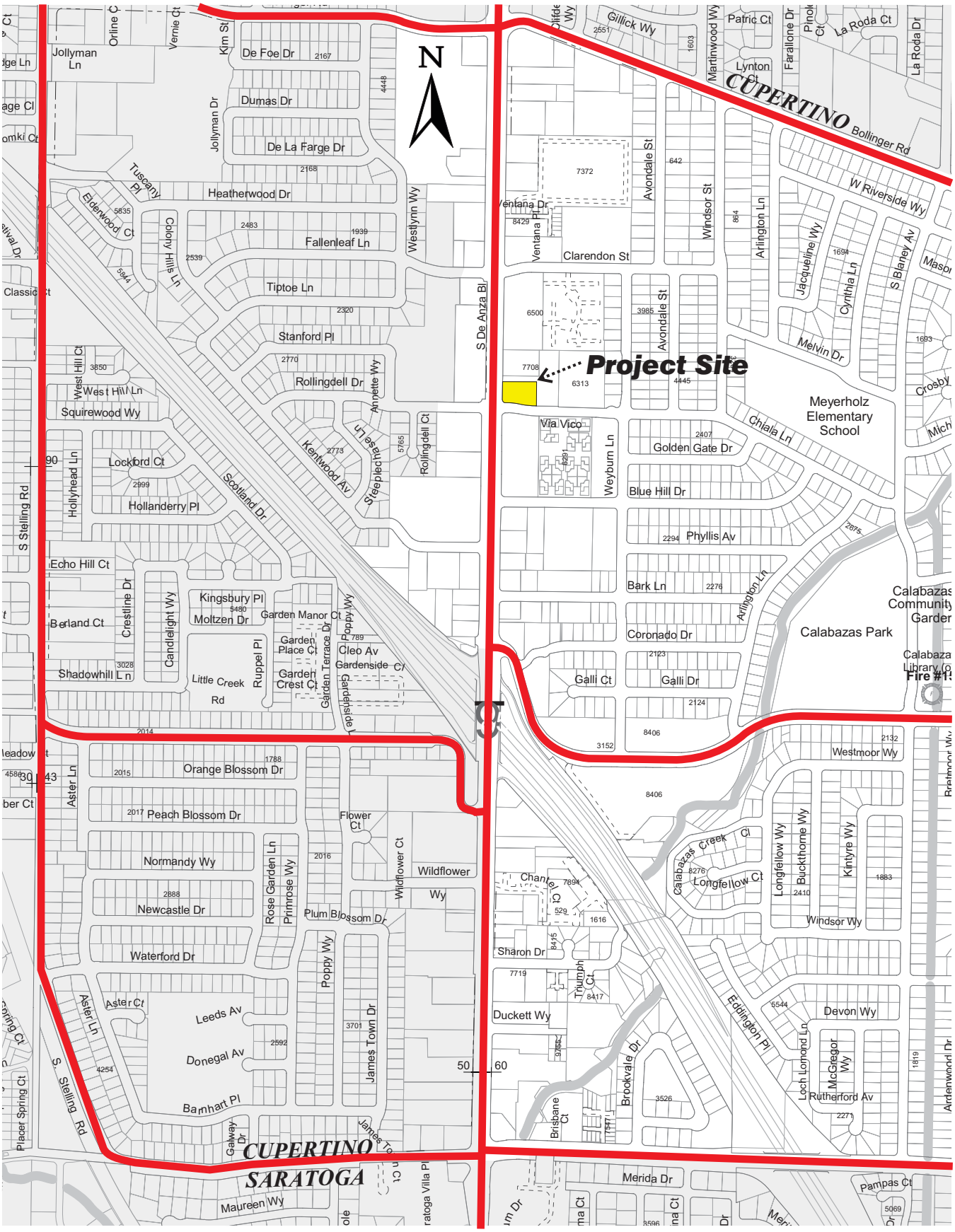
TRANSIT FACILITIES

Valley Transportation Authority, VTA, operates local bus service on S. De Anza Boulevard. Route 53 operates between West Valley College and the Sunnyvale Transit Center weekdays. Route 25 operates daily on Bollinger Road connecting De Anza College with the Alum Rock Transit Center. Express Bus Route 102 operates on Route 85 freeway between South San Jose and Palo Alto weekdays during the morning and afternoon peak traffic hours. The bus routes are shown on Figure 3, Transit Facilities, page 5. As with the bike facilities, if 10% of the employees use transit to get to and from work, that would be four transit trips daily generated by the project. The project will have a negligible impact on local bus service. It is assumed that hotel guests would use their own personal vehicles or use taxi services to go to and from the hotel.

ON-SITE CIRCULATION AND ACCESS

Presently the service station/car wash has two driveways on S. De Anza Blvd. and two on Via Vico. The proposed hotel will have only one driveway on S. De Anza Boulevard and only one driveway on Via Vico. See Site Plan, Figure 4, page 6. The driveway on S. De Anza Boulevard will be right-turn in only as the street is median divided. Vehicles coming from the north on S. De Anza Boulevard will have to make a u-turn at Via Vico. With three lanes in each direction plus the bike lanes there is adequate width for vehicles making the u-turn.

The driveway on Via Vico will be exit only, allowing vehicles to exit the site, turn right onto Via Vico and then be able to turn left, right or go straight through the intersection on S. De Anza Boulevard. There will need to be signage on-site indicating ENTER ONLY at the S. De Anza Boulevard driveway and EXIT ONLY on the Via Vico driveway. Internally there should be a ONE WAY →, RIGHT TURN ONLY, or EXIT → sign facing the ramp from the underground parking directing vehicles to turn right to exit the site.



Street with Bike Lanes

EXISTING BIKE FACILITIES
FIGURE 2

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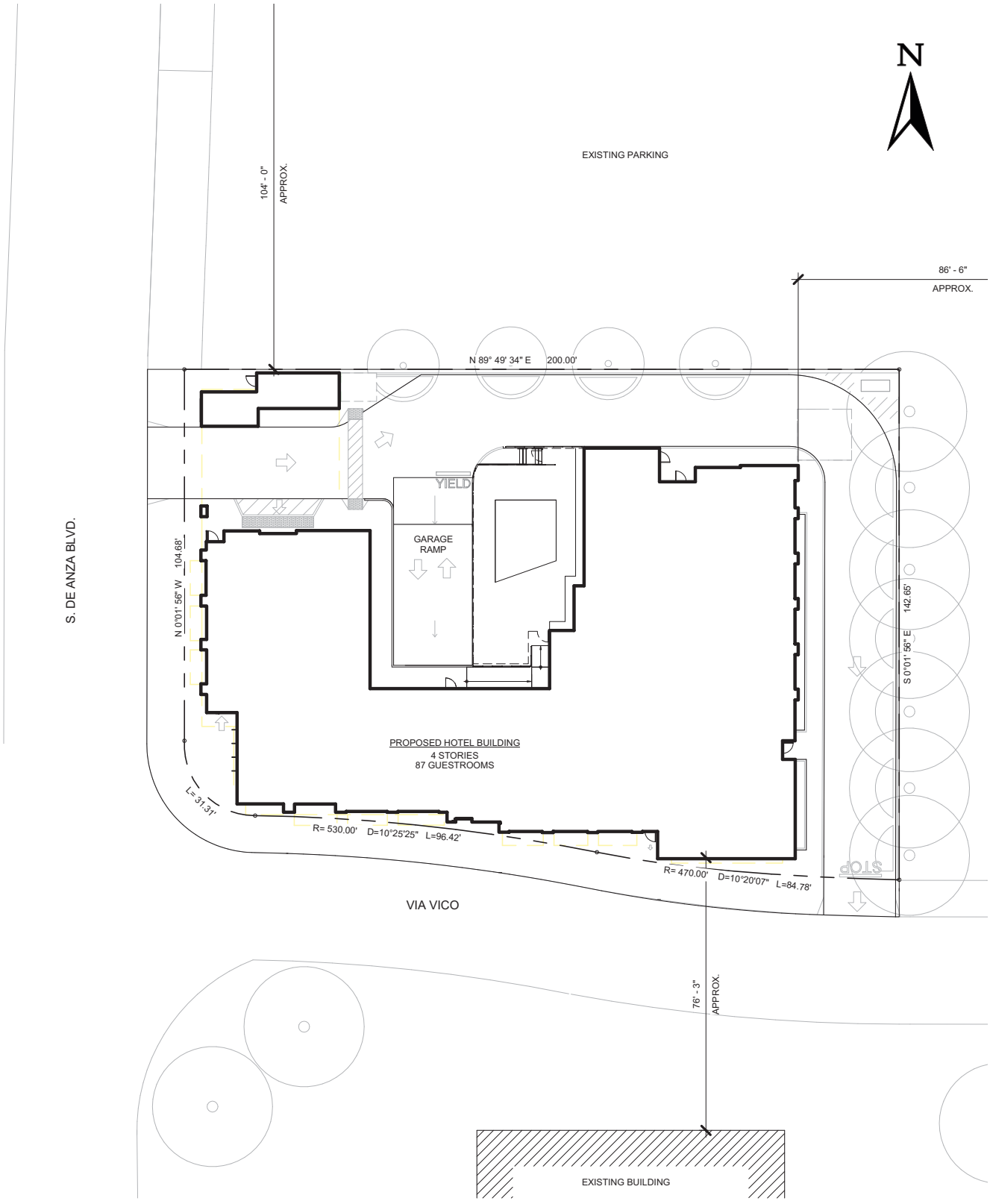
TRANSIT FACILITIES MAP
FIGURE 3



AREA PLAN

0 20 40 60

Scale in Feet

SITE PLAN
FIGURE 4

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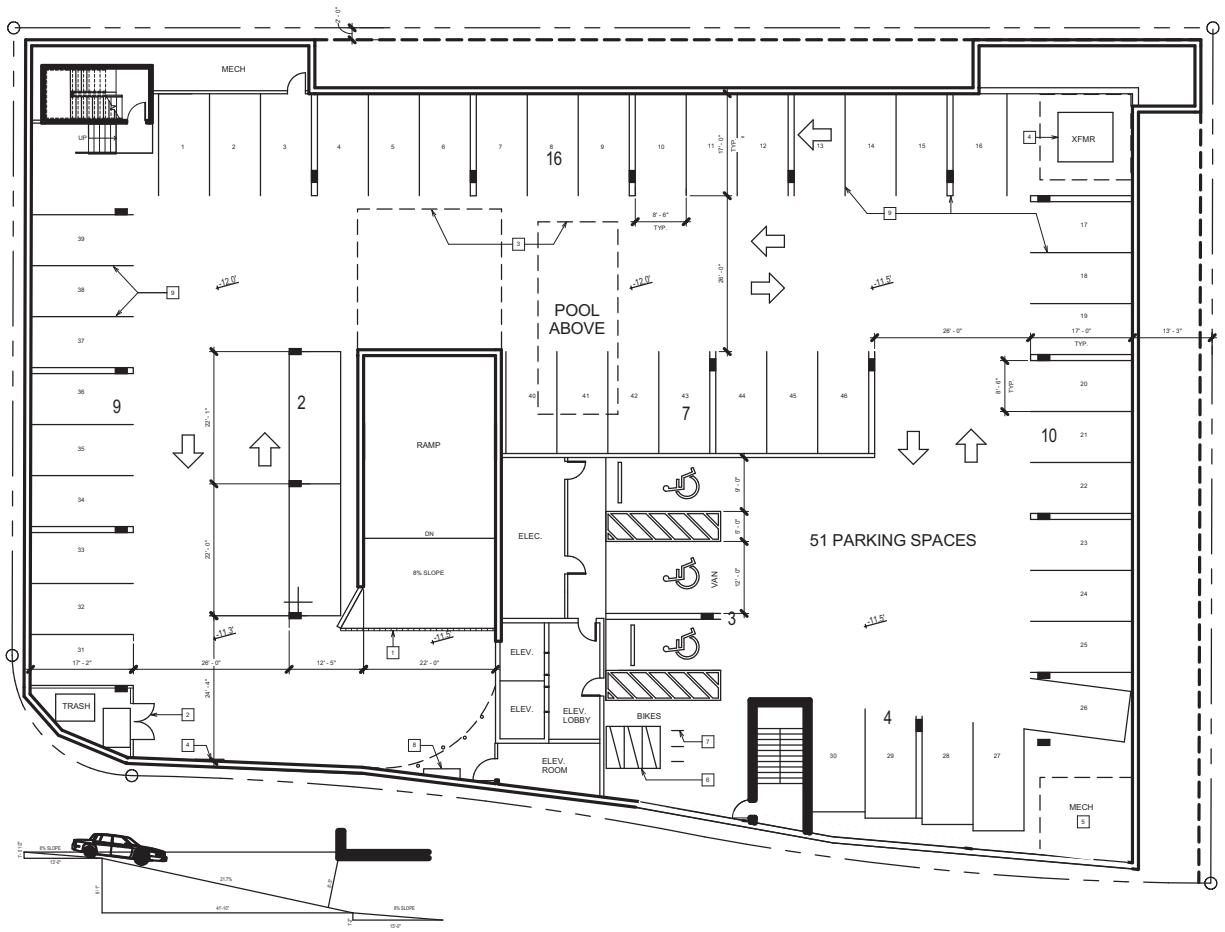
ON-SITE PARKING

The hotel is providing 51 parking spaces of which three are handicap parking spaces. All of the parking will be in an underground parking structure beneath the hotel. Section 20.90.060 SJMC requires one parking space per room or suite plus one space per employee. The Municipal Code (§20.90.220) does allow for a reduction in the number of required parking spaces with the inclusion of a TDM (Transportation Demand Management) plan. The developer proposes to provide a TDM Plan. According to the ITE publication *Parking Generation*, 4th Edition, the peak parking demand on a weekday in a suburban location for a 90 room hotel is 40 spaces.

The parking garage will be accessed by a single 2-way ramp from the ground floor. See Parking Plan, Figure 5, page 8. The garage will have a 2-way aisle and all spaces are perpendicular spaces with the exception of one space which will be slightly angled. The parking spaces are typically 17' deep by 8'-6" wide and the aisles are 26' wide, meeting the City's design requirements for off-street parking spaces. The three handipcap spaces will be located immediately adjacent to the elevators. There will also be lockers for six bicycles and racks for three additional bicycles.

Richard K. Hopper

Richard K. Hopper, P.E.
Principal



RAMP SLOPE DIAGRAM

GARAGE PLAN

SCALE: 1/8"=1'-0"

0 5 10 15 20

CUPERTINO DE ANZA HOSPITALITY LLC SAN JOSE, CALIFORNIA

PLANNING SU

0 16 32 48

Scale in Feet

PARKING PLAN
FIGURE 5

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APPENDIX

1090 S. De Anza Boulevard, San Jose, California
Vehicle Trip Generation
October 4, 2016

LAND USE	LU CODE	SIZE	UNITS	TRIP GENERATION RATE						TRIP GENERATION VOLUME					
				A.M. STREET PEAK HOUR			P.M. STREET PEAK HOUR			A.M. STREET PEAK HOUR			P.M. STREET PEAK HOUR		
				IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Hotel	310	90	RM	0.26	0.19	0.45	0.34	0.36	0.70	23	17	40	31	32	63
Service Station w/ Convenience Mart and Car Wash	946	-8	VFP	6.04	5.80	11.84	7.07	6.79	13.86	-48	-46	-95	-57	-54	-111
									Less Pass-by Trip Ends 62% AM/56% PM	-30	-29	-59	-32	-30	-62
									Primary Trip Ends	-18	-18	-36	-25	-24	-49
									Net Change in Traffic Generation:	5	-1	4	6	8	14

Source: ITE Trip Generation, 9th Edition ©2012
RKH 10/04/2016

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume **SATISFIED* YES ☐ NO ☐**

Record hourly vehicular volumes for any four hours of an average day.

APPROACH LANES	One	2 or More	Hour			
Both Approaches - Major Street						
Higher Approach - Minor Street						

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes ☐ No ☐
OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes ☐ No ☐

WARRANT 3 - Peak Hour **SATISFIED YES ☐ NO ☐**
(Part A or Part B must be satisfied)

PART A **SATISFIED YES ☐ NO ☐**

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND	Yes ☐ No ☒
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND	Yes ☐ No ☒
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes ☒ No ☐

PART B **SATISFIED YES ☐ NO ☒**

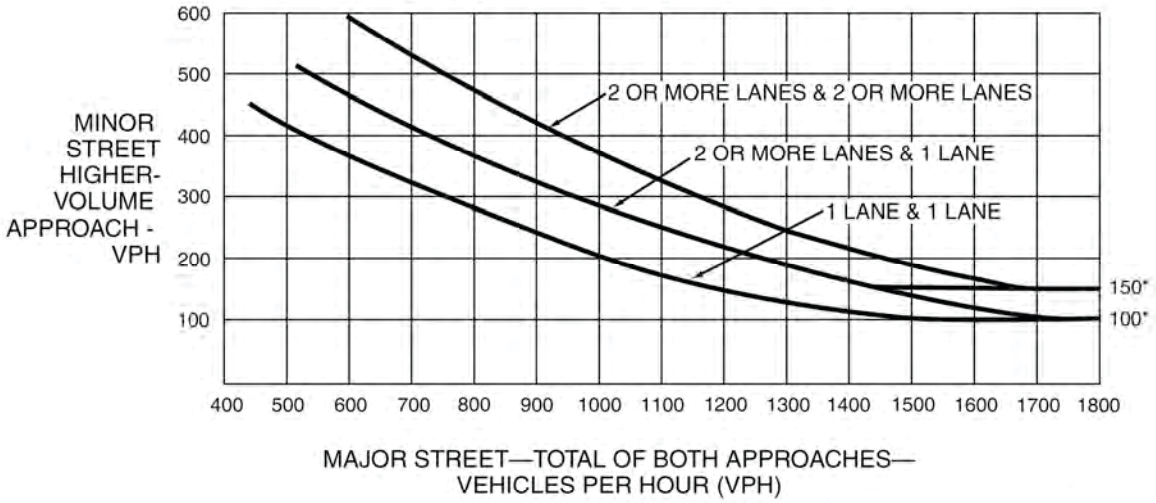
APPROACH LANES	One	2 or More	Hour
Both Approaches - Major Street		3376	
Higher Approach - Minor Street	30		

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes ☐ No ☒
OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes ☐ No ☐

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

S. DeAnza Blvd. & Via Vico/Rollingdell Dr.
City of San Jose, California
October 14, 2016

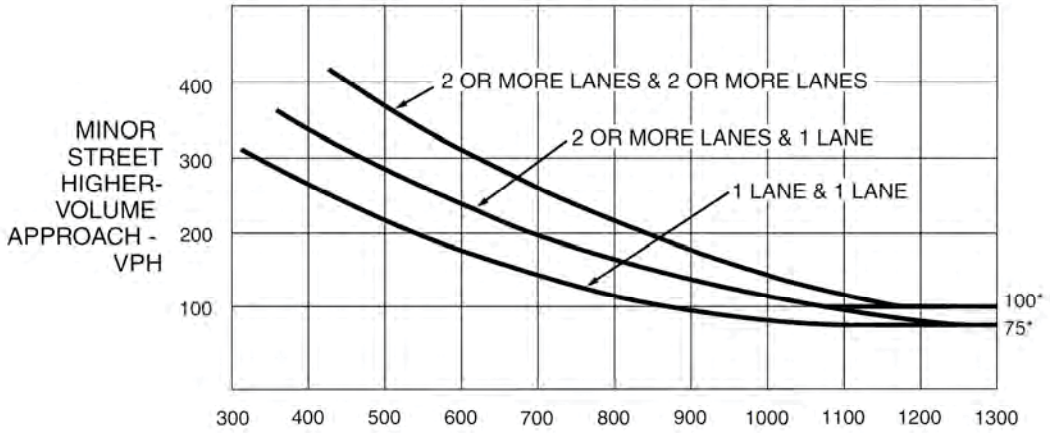
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Minor street higher volume approach 30 vph
Major street total of both approaches 3376 vph
Intersection does not meet peak hour warrant.

Figure 4C-102 (CA). Traffic Count Worksheet