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Transportation Consultants

TECHNICAL MEMORANDUM

Date: February 26, 2013 *Project No.:* 2-030

To: Mr. Reed Moulds
Managing Director
Sand Hill Property Company

From: Christopher Thnay, PE, AICP *Jurisdiction:* Menlo Park

Subject: Results of Preliminary Parking and Traffic Impact Analysis of Proposed Marriott Residence Inn at 555 Glenwood Avenue in Menlo Park

The purpose of this technical memorandum is to present the results of a preliminary traffic evaluation for the proposed Marriott Residence Inn (MRI) located at 555 Glenwood Avenue in Menlo Park. The preliminary site plan shows 138 rooms. The purpose of this study is to analyze potential impacts of the proposed project as compared to the assumptions detailed in the El Camino Real/Downtown Specific Plan Final Environmental Impact Report (EIR) dated June 5, 2012. This is a revised technical memorandum based on comments received from the city on the earlier technical memorandum dated October 19, 2012. [1]

Study Intersections

Based on comments received, it was determined that the preliminary study should focus on five study intersections:

1. El Camino Real/Glenwood Avenue
2. San Antonio Avenue/Glenwood Avenue
3. Garwood Way/Glenwood Avenue
4. Laurel Street/Glenwood Avenue
5. Middlefield Road/Glenwood Avenue

The following scenarios were analyzed:

I. Existing Traffic Condition
II. Existing plus Approved plus Pending Condition
III. Existing plus Approved plus Pending plus Project Condition
IV. 2035 Cumulative Condition
V. 2035 Cumulative plus Project Condition

[1] *Email of comments from Thomas Rogers, dated January 17, 2013*

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Traffic Counts
The existing peak hour counts were available for the two study intersections at El Camino Real/Glenwood Avenue (City 2012 TRAFFIX data) and Middlefield Road/Glenwood Avenue (Downtown Specific Plan EIR report). The a.m. and p.m. peak hour turning movement volumes were collected at the other three intersections.

Exiting Conditions
El Camino Real (SR 82) is a primary north-south arterial that connects San Jose with San Francisco. It enters the Menlo Park just north of Sand Hill Road as a six-lane arterial, becomes a four-lane arterial near downtown Menlo Park, and exits the City as a five-lane arterial (three southbound lanes and two northbound lanes) north of Encinal Avenue. The ADT for this roadway is approximately 38,000 vehicles.

Middlefield Road is a minor north-south arterial roadway that extends from Sunnyvale to Redwood City. It enters Menlo Park at San Francisquito Creek south of Willow Road as a four-lane arterial and narrows to a two-lane arterial at Ravenswood Avenue. The ADT for this roadway is approximately 20,000 vehicles.

Glenwood Avenue is an east-west two-lane collector roadway. It extends from east of Middlefield Road in the Town of Atherton to El Camino Real. This roadway is one of four east-west roadways in the City that cross the Caltrain railroad tracks. The ADT for this roadway is approximately 5,800 vehicles. Glenwood Avenue becomes Valparaiso Avenue west of El Camino Real. There are Class II bike lanes on both sides of Glenwood Avenue.

Garwood Way is a two lane local residential street that is located to the west of the Caltrain railroad tracks. It runs from Encinal Avenue in the north to just south of Glenwood Avenue. It is two-way Stop control on Garwood Way at Glenwood Avenue.

Laurel Street is a two lane north-south local street with a Class II on-street bike lane on both sides of the street. It is all-way Stop control on Laurel Street at Glenwood Avenue.

San Antonio Avenue is a two lane local street with on-street parking. It T's onto Glenwood Avenue and is located directly across from the parking lot of the existing project site.

Intersection Levels of Service
Level of Service is a qualitative index of the performance of an element of the transportation system. Level of Service (LOS) is a rating scale running from A to F, with A indicating no congestion of any kind, and F indicating intolerable congestion and delays.

The *2000 Highway Capacity Manual (HCM)* is the standard reference published by the Transportation Research Board, and contains the specific criteria and methods to be used in assessing LOS. There are several software packages that have been developed to implement HCM. In this study the TRAFFIX software was used to calculate the LOS at the study intersections. Table I summarizes the results of the LOS analysis at the study intersections. Currently, all study intersections operate at an acceptable level of service, except the intersection of Glenwood Avenue/Middlefield Road which operates at LOS F. The City of Menlo Park has established minimum acceptable LOS for roadway and overall intersection operations. The minimum acceptable LOS and results of the existing levels of service analysis are contained in Appendix A.

Table I: Intersection Levels of Service - Existing Traffic Condition

ID	Intersection	Control	Existing Conditions			
			A.M. Peak Hour		P.M. Peak Hour	
			Delay	LOS	Delay	LOS
1	El Camino Real/Valparaiso Ave./Glenwood Ave.	Signal	32.3	C	34.1	C
	EB Approach Critical Movements		61.5	**E**	61.3	**E**
	WB Approach Critical Movements		69.5	**E**	73.1	**E**
2	Glenwood Ave./San Antonio Ave.	Minor St Approach Stop	11.5	B	10.2	B
3	Glenwood Ave./Garwood Way	Minor St Approach Stop	13.8	B	12.4	B
4	Glenwood Ave./Laurel St.	All-Way Stop	16.5	C	11.9	B
5	Glenwood Ave./Middlefield Rd.	Minor St Approach Stop	>150	**F**	>150	**F**

The intersection of El Camino Real/Valparaiso Avenue /Glenwood Avenue operates at LOS C while both the eastbound and westbound approach critical movements operate at LOS E. The minor street stop control intersection of Glenwood Avenue/Middlefield Road operates at LOS F. The other three study intersections operate at acceptable LOS.

It should be noted that the Glenwood/Middlefield intersection would be impacted by the Downtown Specific Plan under both Project and Cumulative Conditions. Mitigation Measure TR-1b of the Specific Plan EIR is installation of a traffic signal at this intersection with fair-share funding coming from individual project applicants. However, the Specific Plan impact is significant and unavoidable as the intersection is under the Town of Atherton's jurisdiction, and therefore the City of Menlo Park cannot guarantee implementation of the mitigation measure.

Near Term Traffic Condition (Scenario II)

The Existing plus Approved plus Pending Projects (Near Term) scenario adds traffic to the previous scenario from the currently proposed/approved/under construction projects but not yet occupied developments. The total amounts of approved and pending projects in the City of Menlo Park were obtained from the Menlo Park CSA TRAFFIX model.

Table II summarizes the results of the intersection LOS analysis. Detailed calculations are shown in Appendix B.

Table II: Intersection Levels of Service - Near Term Traffic Condition (Scenario II)

ID	Intersection	Control	LOS Threshold	Near-Term			
				A.M. Peak Hour		P.M. Peak Hour	
				Delay	LOS	Delay	LOS
1	El Camino Real/Valparaiso Ave./Glenwood Ave.	Signal	D	34.8	C	34.9	C
	EB Approach Critical Movements			62.9	**E**	63.1	**E**
	WB Approach Critical Movements			71.4	**E**	77.4	**E**
2	Glenwood Ave./San Antonio Ave.	Minor St Stop	C	11.9	B	10.0	B
3	Glenwood Ave./Garwood Way	Minor St Stop	C	14.7	B	12.4	B
4	Glenwood Ave./Laurel St.	All-Way Stop	C	19.5	C	12.1	B
5	Glenwood Ave./Middlefield Rd.	Minor St Stop	D	135.6	**F**	>150	**F**

Similar to the existing traffic condition, the intersection of El Camino Real/Valparaiso Avenue /Glenwood Avenue operates at LOS C and both the eastbound and westbound approach critical movements continue to operate at LOS E. And the minor street stop control intersection of Glenwood Avenue/Middlefield Road operates at LOS F. The other three study intersections operate at acceptable LOS.

Near Term plus Project Traffic Condition (Scenario III)

In this scenario the proposed traffic volume generated by the proposed project is added to the volume from Near Term Project scenario.

Traffic Generation

The existing facility serves both independent and assisted living residents aged 62 years or older. No skilled nursing, Alzheimer's care or rehabilitation care is offered. The proposed project is the conversion of the existing market rate assisted living senior housing complex into a limited service hotel. The proposed hotel is the Marriott Residence Inn (MRI) with over 650 locations throughout the United States. The closest MRI is located in Los Altos.

TJKM estimated the a.m. and p.m. peak hour trip generation for the existing facility and the proposed MRI project based on the *Trip Generation, Ninth Edition*, published by the Institute of Transportation Engineers (ITE) as shown in Table III. Based on conversation with city staff, it was determined that a blended rate of the All Suites Hotel (ITE Code 311) and Business Hotel (ITE Code 312) best represents the proposed project.[2]

[2] *Conversation with Chip Taylor on January 31, 2013*

Table III: Estimated Project Trip Generation

Land Use (ITE Code)	*Size*		*Daily*		*A.M. Peak*				*P.M. Peak*			
			Rate	*Trips*	*Rate*	*In*	*Out*	*Total*	*Rate*	*In*	*Out*	*Total*
I. Proposed Project: 138 Rooms Marriott Residence Inn												
Business Hotel (312)/ All Suites Hotel (311) [a]	138	Rooms	6.8	932	0.53	43	30	73	0.59	41	40	81
II. Existing Assisted Senior Adult Housing												
Assisted Living (254)	125	Rooms	2.7	343	0.18	15	7	23	0.29	19	19	37
Net Trips				***589***		***28***	***23***	***51***		***23***	***21***	***44***

Note: [a] - A blended rate based on Business Hotel and All Suites Hotel was assumed.
Source: ITE Trip Generation, Ninth Edition

Since trips generated by the existing land use would not be present once the future MRI project is developed, these estimated trips would be considered a credit to the project and would be deducted from the future project trips. As shown in Table I, the proposed project is expected to generate approximately 51 net trips during the a.m. peak hour and 44 net trips during the p.m. peak hour.

Trip Distribution

Trip distribution is the process of determining the proportion of vehicles that would travel between the project site and various destinations in the vicinity of the study area. Trip assignment is the process of determining the various paths vehicles would take from the project site to each destination. Based on the estimated trip generation, the net peak hour trips were assigned to the surrounding network based on the trip distribution assumptions shown on Table 4.13-7 of the EIR.

LOS Impact Analysis

Table IV shows the LOS results of the Existing plus Approved plus Pending plus Proposed Project scenario. The level of service at the intersection of El Camino Real/Valparaiso Avenue /Glenwood Avenue would change from LOS C to LOS D which is considered acceptable. Similar to the Near Term traffic condition, the eastbound and westbound approach critical movements at the intersection of El Camino Real/Valparaiso Avenue /Glenwood Avenue would continue to operate at LOS E. The increase in delay on the critical movements is less than 0.8 seconds of the significant impact threshold.

The minor street stop control intersection of Glenwood Avenue/Middlefield Road would continue to operate at LOS F. The City's impact criteria also evaluate increases in delay to critical movements. A traffic impact may be considered potentially significant if the addition of the project traffic causes an increase of more than 0.8 seconds of average delay to vehicles on all critical movements for intersections operating at a near term LOS D through F for collector streets and at a near term LOS E or F for arterial streets. Since the increase to the intersection delay is 1.2 seconds during the a.m. peak hour, the traffic impact may be considered potentially significant. Note however, that since delays at unsignalized intersections are measureable up to 150 seconds per the equations of the Highway Capacity Manual, delays near or greater than 150 seconds are considered inaccurate. Since the delay at the intersection is greater than 150 seconds during the p.m. peak hour and 136.8 during the a.m. peak hour (which is less than nine percent from 150 seconds), the estimated increase in delay caused by project traffic might not be accurate.

With a signal, the intersection would operate at LOS B. As noted previously, the Glenwood/Middlefield intersection would be impacted by the Downtown Specific Plan under both Project and Cumulative Conditions. Mitigation Measure TR-1b of the Specific Plan EIR is

installation of a traffic signal at this intersection with fair-share funding coming from individual project applicants. However, the Specific Plan impact is significant and unavoidable as the intersection is under the Town of Atherton's jurisdiction, and therefore the City of Menlo Park cannot guarantee implementation of the mitigation measure.

Table IV: Intersection Levels of Service - Near Term plus Project Traffic Condition (Scenario III)

	Intersection	Control	LOS Threshold	Near-Term				Near-Term Plus Project				Delay Diff.	
				A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hr	P.M. Peak Hr
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS		
1	El Camino Real/Valparaiso Ave./Glenwood Ave.	Signal	D	34.8	C	34.9	C	35.0	C	35.2	D	0.2	0.3
	EB Approach Critical Movements			62.9	**E**	63.1	**E**	63.0	**E**	63.3	**E**	0.1	0.2
	WB Approach Critical Movements			71.4	**E**	77.4	**E**	71.3	**E**	77.5	**E**	-0.1	0.1
2	Glenwood Ave./San Antonio Ave.	Minor St Stop	C	11.9	B	10.0	B	14.6	B	13.8	B	2.7	3.8
3	Glenwood Ave./Garwood Wy.	Minor St Stop	C	14.7	B	12.4	B	14.7	B	12.4	B	0.0	0.0
4	Glenwood Ave./Laurel St.	All-Way Stop	C	19.5	C	12.1	B	19.5	C	12.1	B	0.0	0.0
5	Glenwood Ave./Middlefield Rd.	Minor St Stop	D	135.6	**F**	>150	**F**	136.8	**F**	>150	**F**	**1.2**	0.0

Fair Share Contribution
Table V shows the fair share contribution for the future signal at the intersection of Glenwood Avenue and Middlefield Road based on Caltrans methodology and assumed average signal cost of $700,000.

Table V: Fair Share Contribution to Future Glenwood/Middlefield Intersection Signal

Scenarios	AM Peak Hour	PM Peak Hour
Existing plus Approved Projects	2,572	1,767
2035 Cumulative Conditions	3,129	2,154
Project Contribution	1	1
Project Fair share Contribution *	0.2%	0.3%
	$1,257	$1,292

Note: * Project Fair Share Contribution is based on Caltrans methodology for a typical Traffic Impact Study; the cost for installation of a new traffic signal is assumed to be $700,000.

Source: TJKM Transportation Consultants, Feb. 2013

Transportation Demand Management (TDM)
Alternatively, instead of paying the fair share contribution, the applicant could implement a TDM plan. Detailed analysis of the impacted intersection LOS results indicated that one project trip triggered the 1.2 second delay impact during the a.m. peak hour.

The City of Menlo Park encourages implementation of Transportation Demand Management (TDM). Based on the City's TDM Guidelines, several feasible items to implement includes:

- Subsidizing transit tickets for employees (one peak hour trip credit)
- Creation of preferential parking for carpoolers (two peak hour trips credit)
- Transportation allowance program for bicyclists, walkers and carpoolers (one peak hour trip credit)
- Join the Alliance's guaranteed ride home program (One peak hour trip will be credited for every 2 slots purchased in the program)

A combination of any of the above TDM measures would reduce one or more trips. Additional strategies are discussed in the parking section.

Roadway Segment Analysis
Two roadway segments in the vicinity of the project as listed below were selected for analysis of potential project impacts: the existing roadway volumes used in the analysis were obtained from the City's existing TRAFFIX file.

Estimates of daily traffic generated by the proposed project were added to the existing roadway segment daily volumes. The results are presented in Table V. The City of Menlo Park's roadway segment significance criteria was used to identify potentially significant impacts. [3]

Table VI: Near Term plus Project Roadway Segment Analysis

Roadway Segments	Classification	Existing	Near-Term	Near-Term plus Project	Project-related ADTs		Impact?
					ADT	% Increase of Near-Term	
1. Glenwood Avenue - El Camino to Laurel	Collector	5,899	6,213	6,827	614	9.9%	No
2. Middlefield Road - Glenwood to Oak Grove	Minor Arterial	14,932	16,496	16,505	9	0.1%	No

The pertinent criteria indicated an impact may be considered potentially significant for a minor arterial if the segment ADT is greater than 10,000 (50 percent of capacity) but less than 18,000, and the project related traffic increases the ADT by 12.5 percent or the ADT becomes 18,000 or more. And for collector streets, it is considered an impact if the ADT is greater than 5,000 (50% of capacity) but less than 9,000, and the project related traffic increases the ADT by 12.5% or the ADT becomes 9,000 or more. Based on the criteria, the results indicated that the proposed project would not result in significant traffic impacts at the two roadway segments under Near Term plus Project Conditions.

[3] Analysis of a proposed project's impact on Menlo Park roadway segments is based on project-generated changes to average daily traffic volumes, not on changes to LOS conditions (see Significance Criteria for Street Segments in the Appendix A).

2035 Cumulative Traffic Condition (Scenario IV)

The existing traffic volume was used as a starting base for this analysis. A one percent compound growth per year was assumed for increase in traffic volume within 23 years.[4] This scenario also includes the pending and approved projects.

Table VII shows the LOS results of the 2035 Cumulative Condition.

Table VII: Intersection Levels of Service - 2035 Cumulative Traffic Condition

ID	Intersection	Control	LOS Threshold	2035 Cumulative			
				A.M. Peak Hour		P.M. Peak Hour	
				Delay	LOS	Delay	LOS
1	El Camino Real/Valparaiso Ave./Glenwood Ave.	Signal	D	45.4	D	50.9	D
	EB Approach Critical Movements			82.7	**F**	90.8	**F**
	WB Approach Critical Movements			100.5	**F**	116.0	**F**
2	Glenwood Ave./San Antonio Ave.	Minor St Stop	C	8.1	B	10.7	B
3	Glenwood Ave./Garwood Wy.	Minor St Stop	C	18.8	C	13.9	B
4	Glenwood Ave./Laurel St.	All-Way Stop	C	71.6	**F**	18.2	C
5	Glenwood Ave./Middlefield Rd.	Minor St Stop	D	>150	**F**	>150	**F**

Unlike the Near Term traffic condition, the eastbound and westbound approach critical movements at the intersection of El Camino Real/Valparaiso Avenue /Glenwood Avenue would operate at LOS F.

The minor street stop control intersection of Glenwood Avenue/Middlefield Road would continue to operate at LOS F. The intersection of Glenwood Avenue /Laurel Street would operate at LOS F during the a.m. peak hour.

As noted previously, the Glenwood/Middlefield intersection would be impacted by the Downtown Specific Plan under both Project and Cumulative Conditions. Mitigation Measure TR-1b of the Specific Plan EIR is installation of a traffic signal at this intersection with fair-share funding coming from individual project applicants. However, the Specific Plan impact is significant and unavoidable as the intersection is under the Town of Atherton's jurisdiction, and therefore the City of Menlo Park cannot guarantee implementation of the mitigation measure.

2035 Cumulative plus Project Traffic Condition (Scenario V)

In this scenario the proposed traffic volumes generated by the proposed MRI project is added to the volume from previous base cumulative scenario.

Table VIII shows the LOS results of the Cumulative plus Project scenario. The detailed LOS calculation sheets are contained in Appendix E.

[4] *Consultation with Chip Taylor, City of Menlo Park, January 31, 2013*

Table VIII: Intersection Levels of Service - 2035 Cumulative plus Project Traffic Conditions

	Intersection	Control	LOS Threshold	Cumulative				Cumulative Plus Project				Delay Diff	
				A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hr	P.M. Peak Hr
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS		
1	El Camino Real/Valparaiso Ave./Glenwood Ave.	Signal	D	45.4	D	50.9	D	45.5	D	51.5	D	0.1	0.6
	EB Approach Critical Movements			82.7	**F**	90.8	**F**	82.9	**F**	91.8	**F**	0.2	1.0
	WB Approach Critical Movements			100.5	**F**	116.0	**F**	101.0	**F**	116.0	**F**	0.5	0.0
2	Glenwood Ave./San Antonio Ave.	Minor St Stop	C	8.1	B	10.7	B	17.4	C	16.1	C	9.3	5.4
3	Glenwood Ave./Garwood Wy.	Minor St Stop	C	18.8	C	13.9	B	19.0	C	14.0	B	0.2	0.1
4	Glenwood Ave./Laurel St.	All-Way Stop	C	71.6	**F**	18.2	C	72.0	**F**	18.3	C	0.4	0.1
5	Glenwood Ave./Middlefield Rd.	Minor St Stop	D	>150	**F**	>150	**F**	>150	**F**	>150	**F**	0.0	0.0

The level of service at the intersection of El Camino Real/Valparaiso Avenue /Glenwood Avenue would continue to operate at LOS D which is considered acceptable. Similar to the Cumulative Traffic condition, the eastbound and westbound approach critical movements at the intersection of El Camino Real/Valparaiso Avenue /Glenwood Avenue would continue to operate at LOS F.

The minor street stop control intersection of Glenwood Avenue/Middlefield Road would continue to operate at LOS F. The impact is not considered potentially significant since project traffic causes an increase that is less than 0.8 seconds of average delay to vehicles on all critical movements. As noted previously, the Glenwood/Middlefield intersection would be impacted by the Downtown Specific Plan under both Project and Cumulative Conditions. Mitigation Measure TR-1b of the Specific Plan EIR is installation of a traffic signal at this intersection with fair-share funding coming from individual project applicants. However, the Specific Plan impact is significant and unavoidable as the intersection is under the Town of Atherton's jurisdiction, and therefore the City of Menlo Park cannot guarantee implementation of the mitigation measure. The intersection would operate at LOS B or better with a signal.

The intersection of Glenwood Avenue /Laurel Street would operate at LOS F during the a.m. peak hour. The increase in average delay to vehicles on critical movements is less than 0.8 seconds. Therefore the impact is not considered significant.

Roadway Segment Analysis
Estimates of daily traffic generated by the proposed project were added to the Cumulative roadway segment daily volumes. The results indicated that project impact is not significant and are presented in Table IX.

Table IX: 2035 Cumulative plus Project Roadway Segment Analysis

Roadway Segments	Classification	Existing	2035	2035 plus Project	Project-related ADTs		Impact?
					ADT	% Increase of Near-Term	
1. Glenwood Avenue - El Camino to Laurel	Collector	5,899	7,646	8,260	614	8.0%	No
2. Middlefield Road - Glenwood to Oak Grove	Minor Arterial	14,932	20,057	20,066	9	0.0%	No

Traffic Conclusion
It is estimated that the level of service impact at the five study intersections due to the proposed MRI project is considered acceptable for all intersections except the intersection of Glenwood Avenue/Middlefield Road under Near Term plus Project scenario.

Under Near Term plus Project scenario, the minor street stop control intersection of Glenwood Avenue/Middlefield Road would continue to operate at LOS F. A traffic impact may be considered potentially significant if the addition of the project traffic causes an increase of more than 0.8 seconds of average delay to vehicles on all critical movements for intersections operating at a near term LOS D through F for collector streets and at a near term LOS E or F for arterial streets. Since the increase to the intersection delay is 1.2 seconds during the a.m. peak hour, the traffic impact may be considered potentially significant. Note however, that since delays at unsignalized intersections are measureable up to 150 seconds per the equations of the Highway Capacity Manual, delays near or greater than 150 seconds are considered inaccurate. As the delay at the intersection is greater than 150 seconds during the p.m. peak hour and 136.8 during the a.m. peak hour (which is less than nine percent from 150 seconds), the estimated increase in delay caused by project traffic might not be accurate.

With a signal, the intersection of Glenwood Avenue/Middlefield Road would operate at LOS B. The implementation of a combination of any of the City's recommended TDM Guidelines could reduce one or more project trips and allow the impacted intersection to operate at acceptable condition.

Parking Supply/Demand/Requirement
The Developer is proposing 113 parking stalls for the Project. The potential parking demand of the proposed MRI project were evaluated using two sources: *ITE (Fourth Edition)* and *Los Altos Marriott Residence Inn Survey*.

Parking Generation, ITE, Fourth Edition (2010)
The ITE recently published *Parking Generation, ITE, Fourth Edition (2010)*. The 85th percentile parking rate for Business Hotel (Land use Code 312) is shown as 0.75 vehicles per room on a weekday. The weekend rate is slightly lower at 0.72 vehicles per room. Data for one of the site in the All Suites Hotel (Land use Code 311) showed a parking rate of approximately 0.85 vehicles per room. As mentioned earlier, based on conversation with city staff, it was determined that a blended rate of the All Suites Hotel (ITE Code 311) and Business Hotel (ITE Code 312) best represents the proposed project. Using the blended rate of 0.80, it is estimated that approximately 110 parking stalls would be required for the proposed project.

Using Los Altos Marriott Residence Inn Parking Survey
Lastly, TJKM also determined the parking demand by using the parking survey data that was collected at the Los Altos Marriott Residence Inn between May and September 2012. A summary of the maximum parking occupancy rate for each month is shown in Table X. The detailed parking occupancy survey data is contained in Appendix F.

Table X: Parking Occupancy Survey, MRI Los Altos

Month (2012)	Maximum Parking Occupancy
May	0.85
June	0.87
July	0.87
August	0.88
September	0.86
Maximum Observed	0.88
Average Observed	0.87

Using the maximum parking occupancy of 0.88, approximately 121 parking stalls would be required.

Parking Variance and Spaces on Garwood Way
The El Camino Real/Downtown Specific Plan Final Environmental Impact Report (EIR) listed a parking rate of 1.25 spaces per room for hotel use. The rate applies to a typical full service hotel which is considered considerably higher than the proposed limited service MRI development. Therefore, based on the type of proposed MRI hotel use, the application of Footnote #6 as listed in Table F1 of the Specific Plan was appropriate to support the proposed parking rate in this report.

Currently there are 39 parking spaces on Garwood Way – nine parallel spaces on the westside adjacent to Glenwood Inn and 30 perpendicular parking spaces on the eastside. It was observed that six of the nine parallel parking spaces on the westside and three of the 30 perpendicular parking spaces on the eastside were occupied. The occupied parking is most likely all related to Glenwood Inn since this segment of Garwood Way is adjacent to the building. The parking spaces are not easily accessible for other uses in the area.

Parking Management Strategies
An effective Transportation Demand Management (TDM) programs would reduce the amount of peak period vehicle traffic on roadways and their associated parking demand by encouraging the use of modes other than single-occupant vehicles for travel.

In the vicinity of Glenwood Avenue and El Camino Real, the project area is quite well served by the Caltrain, San Mateo County Transit District (SamTrans) bus service, and local shuttles. SamTrans provides local and regional bus service, and Caltrain provides commuter rail service. Local shuttles are also provided in Menlo Park for free during commute hours by Caltrain and during mid-day hours by the City. Both shuttles are operated during the week (Monday through Friday) only. In addition, there is a Class II bike lanes located on Glenwood Avenue and Laurel Street.

Based on these existing non-auto mode infrastructures in the immediate vicinity, incentives such as subsidized rail and bus passes are likely to be an effective TDM measures for the project due to its proximity to a robust selection of transit options. Facilities and incentives for bicycling and walking are also likely to be effective. Guaranteed ride home programs, which reduce commuter anxiety about the prospect of needing to return home for a family emergency or due to employee illness, are an effective complement to transit and rideshare incentives.

A successful TDM program for the project will include most, if not all, of the following features:

- Preferential parking for carpools and vanpools;
- Secure, convenient bicycle parking;
- Workplace showers and changing areas;
- Carpool match services for employees;
- Parking cash-out programs for alternative modes commuters; and
- Marketing and information programs to encourage alternative transportation modes (which could include partnering with other local organizations such as the Peninsula Congestion Relief Alliance).

Parking Conclusion

Based on a comparison of two parking occupancy rates, it was determined that a reasonable parking demand rate is in the range of 0.75 to 0.88. Typically many parking demand studies are based on the ITE rate. Using a blended ITE Parking rate of 0.80, approximately 110 parking stalls would be required. Since the proposed project would be providing 113 spaces, the parking provided is considered adequate.

Appendix A
- City of Menlo Park Significant Impact Criteria
- Existing Traffic Condition

Appendix B
- LOS Calculation Sheets: Near Term Traffic Conditions

Appendix C
- LOS Calculation Sheets: Near Term plus Project Traffic Conditions

Appendix D
- LOS Calculation Sheets: Cumulative Traffic Condition

Appendix E
- LOS Calculation Sheets: Cumulative plus Project Traffic Condition

Appendix F
- Los Altos Marriott Residence Inn Parking Occupancy Survey