Exhibit E

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Keith Higgins
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MEMORANDUM

Date: July 18, 2023

To: CVR HSGE

From: Keith Higgins, PE, TE

Subject: Carmel Valley Ranch Hotel Expansion, Carmel Valley, Monterey County, CA

Carmel Valley Ranch proposes to add 27 guest units, which would increase the total number of guest units at the facility from 181 units to 208 units. The Project will generate new vehicle trips that will increase traffic on the local and regional road networks. This memorandum discusses the history of development at Carmel Valley Ranch, the extent of traffic mitigations that have already been implemented and programmed, documents an analysis of the volume of trips that the project would potentially add to the local and regional road network, and assesses what traffic impacts there may be beyond those which have been previously identified. It also includes a Vehicle Miles Traveled evaluation as required by a 2020 update to the California Environmental Quality Act (CEQA) for project transportation and circulation impact analysis.

A. Traffic Operations Assessment

1. History of Development at Carmel Valley Ranch

Over the past more than 35 years, Carmel Valley Ranch has become a first-class destination resort. Existing amenities at the Ranch include a championship golf course and clubhouse, a children's activity center, several pools and tennis courts, a fitness center, a full-service spa, casual and fine dining restaurants, corporate meeting space, and miles of hiking trails. Unlike a single use hotel or motel, these amenities allow the guests to stay on site throughout their vacation.

To facilitate guest circulation within the resort, Carmel Valley Ranch operates a total of five (5) shuttles within the resort to transport their guests to any of the on-site amenities on a 24 hour, on-demand basis. Occupancy of the shuttles ranges between 7-12 people. The owners also operate a fleet of five (5) golf carts that are utilized to move people (up to four persons each) and supplies throughout the resort. Carmel Valley Ranch arranges guest travel outside the resort, including the airport through a third-party service.

The application for the Carmel Valley Ranch Specific Plan was submitted to the County in 1975. A Final EIR for the Specific Plan was adopted by the Monterey County Board of Supervisors in October 1975. The Carmel Valley Ranch Specific Plan was approved by the Board of Supervisors in 1977. The Specific Plan

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allows for the development of a residential and resort lodge complex consisting of residential units, a resort lodge and guest units, golf course and clubhouse, stables and tennis facility.

The Carmel Valley Ranch Specific Plan has been revised several times with the most recent revision adopted on October 1, 1996. As amended in 1996, the Specific Plan allows for the development of up to 311 residential units and 208 resort lodge guest units, in addition to the recreation and open space uses. In September 2014 a Use Permit was granted to allow an increase in guest units from 144 to 181 units.

The mitigations for the Carmel Valley Ranch project included payment of fees to construct the Robinson Canyon underpass that eliminated the left turn movement from Robinson Canyon Road to westbound Carmel Valley Road. The proposed additional 27 guest units are being constructed within the context of the development of the 208 guest units allowed by the Carmel Valley Ranch Specific Plan that has already been subject to environmental impact review and mitigation. Therefore, traffic mitigation for the 27 new units has already been identified and applied.

The project will be subject to payment of the Transportation Agency for Monterey County (TAMC) Regional Development Traffic Impact Fee, which was adopted in 2008. Carmel Valley Ranch is incorporated by reference into the Carmel Valley Master Plan and each increment of development is dependent upon conformity with the Specific Plan Amended Conditions of Approval as well as the goals and policies of the General Plan. Monterey County General Plan Policy C-1.11 requires new development to pay the Regional Traffic Impact Fee.

2. Project Trip Generation, Distribution and Assignment

a. Project Trip Generation

A trip generation study of the Carmel Valley Ranch development was performed in April 2014 to establish trip generation rates for the facility. Hotel operations have not changed since then. The data, therefore, still applies to current conditions. This trip generation rate is applied in this analysis to estimate the increase in traffic resulting from the proposed hotel expansion. Traffic volume counts using machine tube counters were performed to establish the traffic generated by the lodge and guest units.

A machine tube counter was installed on Old Ranch Road immediately north of the lodge between Wednesday April 9, 2014, and Friday April 18, 2014, to count traffic generated by the lodge and lodge units. This counter not only counted traffic generated by the lodge and guest units but other traffic not directly attributable to the lodge guest units. The Old Ranch Road traffic volume counts were therefore adjusted to remove trips not directly attributable to the guest units. The non-hotel sources include residential units located on Fairway Lane, Carmel Valley Ranch employees, delivery and service trucks and Carmel Valley Ranch guest shuttle vehicles. The following is a detailed description of the adjustments made to the gross traffic counts collected on Old Ranch Road:

1. Fairway Lane – Traffic generated by residential units on Fairway Lane is not associated with the lodge and guest units. To quantify the amount of traffic from Fairway Lane residences, a machine tube counter was also placed on Fairway Lane to count traffic generated by developed on Fairway Lane. This traffic count was subtracted from the Old Ranch Road traffic count.
2. Employees –The number of employees during weekdays will not increase because of the project. Carmel Valley Ranch staff provided a count of the employee trips during traffic count study period and the

employee trips were deducted from the Old Ranch Road traffic count. The project may result in an increase of one or two housekeeping employees on weekends, but these employees would not affect weekday employee traffic generation.

3. Carmel Valley Ranch Shuttles – Carmel Valley Ranch Shuttles currently operate throughout the day and only within Carmel Valley Ranch. The additional guest units will not materially change the volume of guest shuttle trips made during the day. Carmel Valley Ranch staff provided a count of shuttle trips made during the count period and the shuttle trips were deducted from the Old Ranch Road traffic counts.
4. Security – Carmel Valley Ranch maintains a security force that patrols the grounds. The size and patrolling schedule of the force will not change because of the project. Carmel Valley Ranch staff provided a count of security trips made during the count period and the security trips were deducted from the Old Ranch Road traffic counts.
5. Construction Activity – Traffic generated by construction work underway at the lodge at the time of the traffic counts should not be included in the trip generation rate for the guest units. Carmel Valley Ranch staff provided a count of the vehicle trips generated by construction activity at the lodge during the count period. These trips were subtracted from the Old Ranch Road traffic count.
6. Deliveries – Deliveries are made on a regularly scheduled basis to the Carmel Valley Ranch lodge. The proposed project will not change the number of deliveries made to the facility. Carmel Valley Ranch staff provided a count of delivery truck trips which were deducted from the Old Ranch Road traffic counts.
7. Spa – An analysis of spa usage over an approximate four-month period in late 2010 and early 2011 determined that the spa generates one off-site patron per day (two vehicle trips). These trips were subtracted from the Old Ranch Road traffic volume count.

The resulting trip generation rates for the lodge and guest units are summarized in **Table 1**. Based on the data it was determined that the lodge and guest units generate trips at the rate of 0.27 trips per unit during the AM peak hour and 0.39 trips per unit during the PM peak hour. The lodge and guest units generated an average of 8.33 trips per day per guest unit.

The trip generation rates for the lodge and guest units were used to estimate the trip generation for the proposed project. As shown in **Table 1**, the 27-unit guest room expansion would generate:

- 7 trips during the AM peak hour;
- 11 trips during the PM peak hour; and,
- 225 trips per day.

The lodge contains other uses including a restaurant that is open to the public and trips made by non-guests would be included in the traffic counts collected on Old Ranch Road. Vehicle trips generated by the restaurant and other ancillary uses within the lodge were not subtracted from the Old Ranch Road traffic counts. Therefore, the trip generation rates used to forecast the trip generation for the proposed project and the trip generation estimate for the proposed project should be considered conservative (high).

Table 1
Guest Units Project Trip Generation

	Daily Trips	Existing Average Weekday Trip Generation					
		AM Peak Hour			PM Peak Hour		
		Inbound	Outbound	Total	Inbound	Outbound	Total
+ Old Ranch	1,998	78	55	133	90	61	151
- Fairview Drive	-288	-8	-10	-18	-13	-10	-23
- Employees / Shuttles / Security	-443	-23	-23	-46	-23	-23	-46
- Construction	-56	-28	0	-28	0	-26	-26
- Deliveries	-10	-1	-1	-2	0	0	0
- Spa	-2	0	0	0	0	0	0
Net Trips - Lodge & Guest Units	1,199	18	21	39	54	2	56
Number of Units	144						
Trip Generation Rates (per unit)	8.33	46%	54%	0.27	96%	4%	0.39

	Daily Trips	Project Trip Generation					
		Inbound	Outbound	Total	Inbound	Outbound	Total
Project - 27 units	225	3	4	7	11	0	11

	Daily Trips	Project Internal / External Trips					
		Inbound	Outbound	Total	Inbound	Outbound	Total
Internal (80%)	180	2	3	5	9	0	9
External (20%)	45	1	1	2	2	0	2
Total	225	3	4	7	11	0	11

Most of the new trips generated by the expansion will be trips between the new guest units and on-site resort amenities. Carmel Valley Ranch is a resort hotel and most of the guests stay on the property after arrival. Carmel Valley Ranch estimates that the internal capture rate between the guest units and on-site amenities is 80 percent.[1] This results in an estimate of:

- 45 external trips per day,
- 2 external trips during the AM peak hour and
- 2 external trips during the PM peak hour.

External trips are trips with origins and destinations outside of the resort that would travel on Carmel Valley Road and Robinson Canyon Road to access the Ranch.

[1] The 80% internal capture rate of resort guests is supported by the Carmel Valley Ranch activity record between April 8, 2014, and April 18, 2014 shown on **Attachment A**. During the survey period, each guest unit generated about 8 guest activities per day. Activities include the spa, golf, multiple restaurants, workshops, guided hikes, and horseback riding. The resort offers meeting space and multiple specially designed activities and facilities for corporate and group guests.

b. Project Trip Distribution/Assignment

The external trips generated by the guest units would consist of guest arrival and departure trips, trips to other visitor serving uses in the region and trips to commercial uses in the valley.

The following trip distribution pattern was assumed for the project:

North via Highway 1: 25%
South via Highway 1: 5% West via Rio Road: 10%
Other destinations in Carmel Valley west via Carmel Valley Road: 10% North via Laureles Grade: 40%
Other destinations in Carmel Valley east via Carmel Valley Road: 10%

Table 2 includes a tabulation of the daily and peak hour trips that the project would add to Carmel Valley Road and other roads in the region.

Table 2
Project Trip Assignment

	Daily Trips	AM Peak Hour			PM Peak Hour		
		Inbound	Outbound	Total	Inbound	Outbound	Total
External Trips (20% of Project Trip Generation)	45	1	1	2	2	0	2
Carmel Valley Road - West (50% of External)	23	0.5	0.5	1.0	1.0	0.0	1.0
Highway 1 North (25% of External)	6	0.13	0.13	0.25	0.25	0.00	0.25
Highway 1 South (5% of External)	1	0.03	0.03	0.05	0.05	0.00	0.05
Rio Road / Carmel (10%)	2	0.05	0.05	0.10	0.10	0.00	0.10
Other Valley Destinations (10%)	2	0.05	0.05	0.10	0.10	0.00	0.10
Carmel Valley Road - East (50% of External)	22	0.5	0.5	1.0	1.0	0.0	1.0
East - Laureles Grade (40%)	9	0.20	0.20	0.40	0.40	0.00	0.40
East - Other Destinations (10%)	2	0.05	0.05	0.10	0.10	0.00	0.10

The project would add an estimated 45 vehicle trips per day to Robinson Canyon Road between Old Ranch Road and Carmel Valley Road, 23 trips per day to Carmel Valley Road west of Robinson Canyon Road and 22 trips per day to Carmel Valley Road east of Robinson Canyon Road.

During the AM peak hour, the project would add an estimated 2 vehicle trips to Robinson Canyon Road between Old Ranch Road and Carmel Valley Road, 1 trip to Carmel Valley Road west of Robinson Canyon Road and 1 trip to Carmel Valley Road east of Robinson Canyon Road.

During the PM peak hour, the project would add an estimated 2 vehicle trips to Robinson Canyon Road between Old Ranch Road and Carmel Valley Road, 1 trip to Carmel Valley Road west of Robinson Canyon Road and 1 trip to Carmel Valley Road east of Robinson Canyon Road.

The project trip assignment shown in **Table 2** indicates that the contribution of project trips to some roadway segments will be less than 1 trip during the peak hour. The addition of trips to a roadway segment that are less than a value of one indicates that the project will add trips to the segment, but the contribution will average less than one trip per day.

Most of the new trips generated by the expansion will be trips between the new guest units and on-site resort amenities, but some off-site trips would be generated that would include trips to destinations in the Valley and outside the Valley. It is anticipated that most of the trips added to the regional road network by the project will be trips associated with guest arrivals and departures.

c. Guest Check-in / Check-out Trips

This section of the memorandum documents an analysis of the trips that would be generated by guest check-in and check-out.

Guest check-in and check-out data for 2013 was provided by Carmel Valley Ranch. The data was compiled to show the number of guest check-ins and check-outs by time-of-day and by day-of- week for the entire 2013 year. The average number of arrivals and departures per weekday was determined from the data. Also, the average peak one-hour number of check-ins and check-outs during the AM and PM peak commute periods was determined for 2013. Using this data, the percentage of total weekday daily check-outs that occurs during the AM peak commute hour and the percentage of total weekday daily check-ins that occurs during the PM peak commute hour were determined. The peak commute periods are between 7 am and 9 am in the morning and 4 pm and 6 pm in the afternoon. The peak commute hours are the peak one-hour of traffic during the peak commute periods. For this analysis, it was assumed that the peak one-hour of check-outs during the morning commute period and the peak one-hour of check-ins during the afternoon peak commute period coincide with the peak one-hour of traffic on the adjacent road network. The percentage of total weekday check-ins during the PM peak commute hour and the percentage of total weekday check-outs during the AM peak commute hour were used to calculate the number of check-ins and check-outs during the AM and PM peak commute hours for the new 27 guest units.

Table 3 provides a summary of the calculations. Note that the number of check-ins during the AM peak period and the number of check-outs during the PM peak period are negligible. The average number of guest check-ins during the weekday AM peak hour in 2013 was 0.2 check-ins per day, or 0.002 check-ins per day per room. The average number of guest check-outs during the weekday PM peak hour in 2013 was 0.3 check- outs per day, or 0.002 check-outs per day per room. The project will not materially add to the number of check-ins that occur during the AM peak hour or to the number of check- outs that occur during the PM peak hour. Therefore, the calculations in **Table 3** on the following page show the estimated number of guest check-outs generated by the project during the AM peak hour and the estimated number of guest check-ins during the PM peak hour. An explanation of the calculations is provided below:

Check Out

1. In 2013, there was an average of 41.2 check-outs per weekday.
2. The average rate of guest check-outs in 2013 was 0.29 check-outs / room / weekday.
3. The estimated guest check-outs per weekday for the 27 new guest units is 7.8 (0.29 x 27).
4. Based upon the guest check-out data provided by Carmel Valley Ranch, 9.0 percent of the daily check-outs occur during the AM peak commute hour.

5. Therefore, the estimated average number of guest peak hour check-outs per weekday for the 27-unit project is 0.70 (7.8 x 0.09).

Check In

1. In 2013, there was an average of 49.5 check-ins per weekday.
2. The average rate of guest check-ins in 2013 was 0.34 check-ins / room / weekday.
3. The estimated guest check-ins per weekday for the 27 new guest units is 9.2 (0.34 x 27).
4. Based upon the guest check-in data provided by Carmel Valley Ranch, 16.7 percent of the daily check-ins occur during the PM peak commute hour.
5. Therefore, the estimated average number of peak hour check-ins per weekday for the 27-unit project is 1.5 (9.2 x 0.167).

Table 3
Carmel Valley Ranch Guest Unit Expansion Guest Check-In / Check-Out Trip Generation

GUEST DEPARTURES DURING THE AM PEAK HOUR	
	Departures
2013 Conditions	
2013 Average Departures Per Weekday	41.2
2013 Average Departures Per Weekday Per Unit	0.29
Percentage of Departures in the AM Peak Hour	9.0%
Project Conditions	
CVR Expansion Units (The Project)	27
Average Additional Departures Per Weekday (27 x 0.29)	7.8
Average Departures Per Weekday During the AM Peak Hour (9.0% of daily)	0.70

GUEST ARRIVALS DURING THE PM PEAK HOUR	
	Arrivals
2013 Conditions	
2013 Average Arrivals Per Weekday	49.5
2013 Average Arrivals Per Weekday Per Unit	0.34
Percentage of Arrivals in the PM Peak Hour	16.7%
Project Conditions	
CVR Expansion Units (The Project)	27
Average Additional Arrivals Per Weekday (27 x 0.34)	9.2
Average Arrivals Per Weekday During the PM Peak Hour (16.7% of daily)	1.5

Based on 2013 guest and arrival data for Carmel Valley Ranch, the proposed 27-unit project would generate an average of 0.70 guest departure trips per weekday during the AM peak commute hour and 1.5 guest arrival trips during the PM peak commute hour. Arrival and departure trips would primarily use Highway 1 and Laureles Grade to access the project.

3. Project Traffic Effects

This section of the memorandum analyzes potential project impacts to Robinson Canyon Road, Carmel Valley Road, and Highway 1 north of Carmel Valley Road. The analysis shows that in context of existing traffic conditions on Carmel Valley Road and Robinson Canyon Road, the proposed 27 additional guest units

would not have a significant impact to traffic operations on these roadways. Furthermore, as previously discussed, the Carmel Valley Ranch Specific Plan (revised in 1996) allows the development of 208 guest units. The impact of that number of units was fully analyzed. The total number of guest units after the project is developed would equal the number of guest units allowed by the Carmel Valley Ranch Specific Plan.

a. Robinson Canyon Road

According to the Monterey County published statistics, Robinson Canyon Road between Carmel Valley Road and Holt Road carried the following volumes since 2014. Volumes have generally been consistent except for 2020, during the height of the Covid pandemic.

Table 4
Robinson Canyon Road Daily Traffic

Year	Average Daily Traffic
2014	3,500
2015	3,700
2016	4,000
2017	3,600
2018	4,400
2019	3,700
2020	2,400*
2021	3,700
2022	3,100

* - 2020 was during the Covid pandemic

Source: “Average Daily Traffic,” Monterey County Department of Public Works, Traffic Engineering, annual publications from 2015 through 2022.

Robinson Canyon Road had an ADT of about 3,100 in 2022. The highest volume recorded in the past 9 years was 4,400 in 2018. The capacity of a two-lane collector roadway such as Robinson Canyon Road is 12,000 vehicles per day and volumes less than 6,000 vehicles per day reflect LOS A operations. Robinson Canyon Road currently operates at LOS A. With the estimated 45 external project trips added to Robinson Canyon Road, Robinson Canyon Road would carry 3,145 vehicles per day (an increase of 1.5%) and would continue to operate at LOS A. The proposed project will not significantly impact Robinson Canyon Road.

b. Carmel Valley Road (CVR)

According to the Carmel Valley Master Plan Supplemental Policies, traffic operations on Carmel Valley Road are evaluated based on two factors – 1) level of service and 2) Average Daily Traffic (ADT) thresholds. The traffic standards for the Carmel Valley Road segments are as follows:

a) LOS of “C” and ADT below its threshold specified in Policy CV-2.17(a) for Segments 1, 2, 8, 9, 10, 11, 12 and 13 is an acceptable condition;
b) LOS of “D” and ADT below its threshold specified in Policy CV-2.17(a) for Segments 3, 4, 5, 6 and 7 is an acceptable condition.

A project impact would be significant if it caused the level of service to degrade from an acceptable level of service to an unacceptable level of service or caused a facility already operating at an unacceptable LOS D

or LOS E condition to deteriorate to a lower level of service value (i.e., from LOS D to LOS E or LOS F; or from LOS E to LOS F).

Carmel Valley Master Plan Supplemental Policy CV-2.17 requires the County to annually perform a traffic monitoring program analyzing ADT (Average Daily Traffic) thresholds as well as LOS (Levels of Service) based on PTSF (Percent Time Spent Following) for Carmel Valley Road segments 3 through 7 and 10. A comprehensive analysis of all 13 major roadway segments including Carmel Valley Road, Carmel Rancho Boulevard and Rio Road is required on 5-year intervals. The most recent annual report was conducted by County staff in 2022. The most recent comprehensive 5-year study was conducted by Peters Engineering Group under contract with Monterey County in 2020. The results of both studies are summarized below. The 2020 comprehensive report was conducted in the middle of the Covid pandemic. The 2022 annual report was partially affected by Covid pandemic policies still in place in the first half of 2022.

To provide a more complete assessment of traffic conditions in Carmel Valley, a summary of the previous 5 -year comprehensive study (conducted in 2015) is included. Traffic volume trends between 2015 and 2022 are also provided. This documents that the similarity between 2015 and 2022 data is due to similarities in Carmel Valley traffic volumes over that 7-year period, which includes the time before and after the Covid pandemic.

i. 2022 CVMP Annual Volume Report by County Staff

The results of the most recent annual traffic monitoring study entitled “Memorandum - 2022 Carmel Valley Master Plan (CVMP) Annual Volume Report,” from Chad Alinio to Randy Ishii, Monterey County Public Works, Facilities & Parks, November 22, 2022, is provided in **Tables 5** and **6**.

Table 5
2022 Carmel Valley Road ADT Segment Thresholds

Segment	Threshold LOS	Threshold Volume	June ADT (2022)	June ADT Exceeds Threshold?	June Reserve Capacity (2022)	October ADT (2022)	October ADT Exceeds Threshold?	October Reserve Capacity (2022)
3 CVR Esquiline Rd - Ford Rd	D	9,065	8,333	No	732	7,642	No	1,423
4 CVR Ford Rd - Laureles Grade	D	11,600	10,124	No	1,476	10,602	No	998
5 CVR Laureles Grade - Robinson Cyn Rd	D	12,752	10,494	No	2,258	10,969	No	1,783
6 CVR Robinson Cyn Rd - Schulte Rd	D	15,499	13,368	No	2,131	13,815	No	2,220
7 CVR Schulte Rd - Rancho San Carlos Rd	D	16,340	14,877	No	1,463	15,848	No	2,691
10 CVR Carmel Rancho Blvd - SR 1	C	27,839	20,790	No	7,049	24,770	No	3,069

Source: “Memorandum - 2022 Carmel Valley Master Plan (CVMP) Annual Volume Report,” from Chad Alinio to Randy Ishii, Monterey County Public Works, Facilities & Parks, November 22, 2022

Notes:
1. LOS: Level of Service
2. Reserve Capacity: The capacity available before the threshold volume for the segment is reached.
3. CVR = Carmel Valley Road
4. CRB – Carmel Rancho Boulevard
5. The “Memorandum - 2022 Carmel Valley Master Plan (CVMP) Annual Volume Report,” from Chad Alinio to Randy Ishii, Monterey County Public Works, Facilities & Parks, November 22, 2022 states that, “Typically, the October timeframe is chosen to assure that the week that was counted was when both the Carmel Unified School District and All Saints Episcopal Day schools were in session. However, shelter-in place orders and/or hybrid/remote learning were still in effect during the end of the 2021-2022 school year (during the week June count data is typically collected), as school

districts were adjusting to updated State guidelines and phasing a return to in-person classes for the 2022-23, school-area traffic. The June count may be atypical."

Table 5 shows the ADT thresholds and the 2022 June and October daily traffic volumes for Carmel Valley Road Master Plan segments 3 through 10. The traffic volume data indicate that all the Carmel Valley Road Segments carry less than the threshold volumes specified in Carmel Valley Master Plan Policy CV-2.17(a). In addition, the reserve capacity available on each segment far exceeds the total estimated external trip generation for the project (45 vehicle trips per day). The project will add an estimated 23 trips per day to Carmel Valley Road west of Robinson Canyon Road and 22 trips per day to Carmel Valley Road east of Robinson Canyon Road. Therefore, the ADT threshold volumes specified in Policy CV-2.17(a) would not be exceeded on any Carmel Valley Road segment with the project developed.

Table 6
2022 Carmel Valley Road Two-Lane Segment Levels of Service

	Segment	Threshold LOS	Threshold PTSF	PTSF	LOS	PTSF	LOS	Exceeds Threshold
3	CVR Esquiline Rd - Ford Rd	D	>85	75.8%	-	69.2%	D	No
4	CVR Ford Rd - Laureles Grade	D	>85	75.8%	D	80.5%	D	No
5	CVR Laureles Grade - Robinson Cyn Rd	D	>85	81.1%	-	82.2%	D	No
6	CVR Robinson Cyn Rd - Schulte Rd	D	>85	**85.4%**	**E**	85.4%	D	**Yes**
7	CVR Schulte Rd - Rancho San Carlos Rd	D	>85	81.5%	D	**88.2%**	**E**	**Yes--Oct**

Source: "Memorandum - 2021 Carmel Valley Master Plan (CVMP) Annual Volume Report," from Chad Alinio to Randy Ishii, Monterey County Public Works, Facilities & Parks, December 10, 2021

Notes:
1. LOS: Level of Service
2. PTSF: Percent Time Spent Following
3. Volumes and LOS for each segment are the worst-case between the June 2015 and October 2015 counts.
4. CVR = Carmel Valley Road

Table 6 shows the existing LOS and corresponding PTSF for the two-lane segments of Carmel Valley Road, which is the second traffic monitoring metric. In 2022, the two-lane segments of Carmel Valley Road operate with a directional Percent Time Spent Following (PTSF) of less than 85.0 (LOS D threshold) except for Segment 6: Robinson Canyon Road – Schulte Road and Segment 7: Schulte Road and Rancho San Carlos Road. An 85.0 PTSF is the break point between the LOS D and LOS E level of service categories. Based on the PTSF performance measure, Segments 6 and 7 currently operate at an unacceptable LOS E during the AM and/or PM peak hour and all other two- lane segments on Carmel Valley Road operate at LOS D or better.

Both Segments 6 and 7 are located west of Carmel Valley Ranch. As shown in Table 2, the project would add an estimated 1.0 vehicle trips during the AM peak hour (0.5 trips eastbound and 0.5 trips westbound) and 1.0 vehicle trips during the PM peak hour (1.0 trips eastbound and 0.0 trips westbound) to Carmel Valley Road west of Robinson Canyon Road, including Segments 6 and 7. The addition of project trips would increase the PTSF value of Segment 7 by a small fraction (less than 0.5) and would not cause segment operations to deteriorate to a lower level of service category. And the addition of project trips would not cause the volume of traffic carried on the roadway to exceed the capacity of the roadway (i.e., volume-to-capacity ratio > 1.0).

The project would not significantly impact Carmel Valley Road between Robinson Canyon Road and Rancho San Carlos Road.

The project trips would have minimal impact to the PTSF values shown in Table 5 for the other two-lane segments on Carmel Valley Road. The change in PTSF resulting from the project would not cause the segment levels of service to deteriorate worse than a PTSF value of 85.0, which is the threshold value between LOS D and LOS E. Therefore, the project would not significantly impact the two-lane segments of Carmel Valley Road.

ii. 2020 Carmel Valley 5-Year Monitoring Report

The "Carmel Valley Road Five-Year Traffic Monitoring – 2020," Monterey County, California, Peters Engineering Group, December 10, 2020 (2020 Monitoring Report), is the most recent update to the 5-year Carmel Valley Road traffic monitoring program. The 5-year monitoring report is more comprehensive than the annual report. It includes the analysis of levels of service for Carmel Valley Road Segments 3 through 7 and 10 as well as an analysis of the ADT and PTSF thresholds for all segments.

Table 7 shows the ADT thresholds and the 2020 June and October daily traffic volumes for Carmel Valley Road Master Plan segments 1 through 13. The traffic volume data was obtained from the 2020 Annual Carmel Valley Road Traffic Volume Report. Currently, all the Carmel Valley Road Segments carry less than the threshold volumes specified in Carmel Valley Master Plan Policy CV-2.17(a). In addition, the reserve capacity available on each segment noticeably exceeded the total estimated external trip generation for the project (45 vehicle trips per day). The project will add an estimated 23 trips per day to Carmel Valley Road west of Robinson Canyon Road and 22 trips per day to Carmel Valley Road east of Robinson Canyon Road. Therefore, the ADT threshold volumes specified in Policy CV-2.17(a) would not be exceeded on any Carmel Valley Road segment with the project developed.

Table 7
2020 Carmel Valley Road ADT Segment Thresholds

	Segment		Threshold LOS	Threshold Volume	Existing June ADT (2015)	Existing June ADT Exceeds Threshold?	Existing June Reserve Capacity	Existing October ADT (2015)	Existing October ADT Exceeds Threshold?	Existing October Reserve Capacity
1	CVR	CVMP Boundary - Holman Rd	C	8,487	3,084	No	5,403	2,791	No	5,696
2	CVR	Holman Rd - Esquiline Rd	C	6,835	3,211	No	3,624	2,926	No	3,909
3	CVR	Esquiline Rd - Ford Rd	D	9,065	8,058	No	1,007	7,913	No	1,152
4	CVR	Ford Rd - Laureles Grade	D	11,600	9,196	No	2,404	9,064	No	2,536
5	CVR	Laureles Grade - Robinson Cyn Rd	D	12,752	9,732	No	3,020	9,551	No	3,201
6	CVR	Robinson Cyn Rd - Schulte Rd	D	15,499	13,072	No	2,427	13,279	No	2,220
7	CVR	Schulte Rd - Rancho San Carlos Rd	D	16,340	13,513	No	2,827	16,067	No	2,691
8	CVR	Rancho San Carlos Rd - Rio Rd	C	48,487	18,013	No	30,474	18,205	No	30,282
9	CVR	Rio Rd - Carmel Rancho Blvd	C	51,401	18,173	No	33,228	18,962	No	8,877
10	CVR	Carmel Rancho Blvd - SR 1	C	27,839	18,698	No	9,141	18,962	No	8,877
11	CRB	Carmel Valley Rd - Rio Rd	C	33,495	12,122	No	21,373	12,522	No	20,973
12	Rio Road	Eastern Terminus - Carmel Rancho Blvd	C	6,416	902	No	5,514	875	No	5,541
13	Rio Road	Carmel Rancho Blvd - SR 1	C	33,928	6,965	No	26,963	6,980	No	26,948

Source: Carmel Valley Road Five-Year Traffic Monitoring – 2020," prepared for County of Monterey by Peters Engineering Group, December 10, 2020

Notes: See following page.
Table 5 Notes:
1. Reserve Capacity: The capacity available before the threshold volume for the segment is reached.
2. CVR - Carmel Valley Road; CRB – Carmel Rancho Boulevard

According to the 2020 Carmel Valley Master Plan Volume Report, the two-lane segments of Carmel Valley Road operate with a directional Percent Time Spent Following (PTSF) of less than 85.0 except for Segment 6: Robinson Canyon Road – Schulte Road and Segment 7: Schulte Road and Rancho San Carlos Road

An 85.0 PTSF is the break point between the LOS D and LOS E level of service categories. Based on the PTSF performance measure, all two- lane segments on Carmel Valley Road operateD at LOS D or better in 2020. **Table 8** shows the existing PTSF for the two-lane segments of Carmel Valley Road.

Table 8
2020 Carmel Valley Road Two-Lane Segment Levels of Service

Segment	Threshold LOS	Threshold PTSF	June 2020 Vehicles Per Hour Highest Direction	Directional HCM 2010 PTSF	LOS	Oct 2020 Vehicles Per Hour Highest Direction	Directional HCM 2010 PTSF	LOS
3 CVR Esquiline Rd - Ford Rd	D	>85	388	69.9	D	368	69.0	C
4 CVR Ford Rd - Laureles Grade	D	>85	498	75.7	D	511	75.0	D
5 CVR Laureles Grade - Robinson Cyn Rd	D	>85	620	83.6	D	610	81.3	D
6 CVR Robinson Cyn Rd - Schulte Rd	D	>85	665	81.3	D	682	81.5	D
7 CVR Schulte Rd - Rancho San Carlos Rd	D	>85	729	82.1	D	721	82.6	D

Source: 2015 CVMP Annual Report of Traffic Volumes (PTSF Method, HCM 2010), Monterey County Department of Public Works, June, and October 2015.

Notes:
1. LOS: Level of Service
2. PTSF: Percent Time Spent Following
3. pcphpl: passenger cars per hour per lane
4. Volumes and LOS for each segment are the worst-case between the June 2015 and October 2015 counts.
5. CVR = Carmel Valley Road

iii. Carmel Valley Traffic Growth Trends – 2015 through 2022

Like Robinson Canyon Road, the Covid pandemic resulted in lower traffic volumes than would occur under normal circumstances from the beginning of 2020 through the first half of 2022. The following quote from Pages 4 and 5 of the 2020 Monitoring Report describes some of the specific changes in activity levels at major traffic generators in Carmel Valley. "Stay-at-home orders were in place because of the COVID-19 pandemic; however, counts were performed as required by the SPA (Carmel Valley Master Plan Supplemental Policies). Carmel Unified School District was not in session during the June counts, and the district was utilizing distance learning (students not attending campuses in person) when the October counts were performed. All Saints Day School, with an enrollment of approximately 165 students, was not in attendance during the June counts but was holding in-person classes during the October counts. Most special events in Carmel Valley and Laguna Seca were cancelled in 2020. No large special events were held while the counts were being performed." In addition, many businesses were still affected, and residents' work and shopping trips were still reduced during the June 2022 data collection. The 2022 annual monitoring is therefore not necessarily representative of current (2023) conditions.

Table 9 on the following page provides average daily traffic between 2015 and 2022 on each of the segments analyzed in the 2020 and 2022 Monitoring Reports.

Table 9
Carmel Valley Road Segment Traffic Volumes – 2015 through 2022

Segment No.	Road	2014	**2015**	2016	2017	2018	2019	2020 (Covid)	2021 (Covid)	2022 (First Half Covid)	2019 Difference from 2015 by Segment	2020 Difference from 2015 by Segment	2022 Difference from 2015 by Segment
1	CVR	3,200	**3,100**	3,200	3,100	3,100	3,100	**2,900**	3,100	**2,700**	0	-200	-400
2	CVR	3,500	**3,500**	3,600	3,600	3,600	3,700	**3,100**	3,400	**3,200**	+200	-400	-300
3	CVR	8,200	**8,200**	8,600	8,600	8,800	9,000	**8,000**	8,700	**8,000**	+800	-200	-200
4	CVR	10,800	**11,000**	11,300	11,300	11,000	11,000	**9,100**	10,200	**10,300**	0	-1,900	-700
5	CVR	9,400	**11,200**	11,600	11,400	11,500	10,800	**9,600**	10,800	**10,700**	-400	-1,600	-500
6	CVR	11,100	**14,400**	14,600	14,900	13,400	14,400	**13,200**	13,500	**13,500**	0	-1,200	-900
7	CVR	15,800	**16,000**	16,100	16,500	16,200	16,200	**13,600**	14,800	**15,100**	+100	-2,400	-900
8	CVR	19,800	**19,100**	19,500	19,800	19,400	19,800	**18,100**	18,800	**18,000**	+700	-1,000	-1,100
9	CVR	24,400	**24,600**	24,600	24,800	24,400	24,500	**19,800**	22,800	**22,000**	-100	-4,800	-2,600
10	CVR	22,500	**22,500**	22,300	22,700	23,400	23,400	**18,800**	21,000	**22,800**	+900	-3,700	+300
11	Carmel Rancho	12,400	**15,200**	15,400	15,000	16,900	14,100	**10,500**	12,300	**14,600**	-1100	-4,700	-600
12	Rio Rd	710	**710**	730	750	690	700	**900**	1,100	**650**	-10	+190	-60
13	Rio Rd	11,200	**11,500**	11,700	11,500	10,000	10,700	**7,000**	8,600	**8,600**	-800	-4,500	-2,900
Total		158,010	**161,010**	163,230	163,950	162,390	161,400	**134,600**	149,100	**150,150**	+290	-26,410	-10,860
Overall % Change from 2015		-1.9%	**x-x**	1.2%	1.8%	0.9%	+0.2%	**-16.4%**	-7.4%	**-6.7%**	+0.2%	-16.4%	-6.7%

Source: "Average Daily Traffic," Monterey County Department of Public Works, Traffic Engineering, annual publications from 2015 through 2022.

Table 9 indicates that total traffic volumes increased about 0.2% on roads throughout Carmel Valley between 2015 and 2019. This is an average of about 0.04% per year, which is essentially no change. However, the total ADT declined about 16.4% in 2020 from 2015. This is primarily due to the Covid pandemic, as described above. Although traffic volumes have increased since 2020, 2022 volumes were lower than 2015 volumes, although they were on average only about 6.4% less than 2015 volumes. The only segment that had an increase was Carmel Valley Road between Highway 1 and Carmel Rancho Boulevard. This segment had an increase of about 300 vehicles per day (1.3%) above 2015 volumes. In conclusion, the 2015 Monitoring Study is more consistent with current conditions than the more recent 2022 study and should be used as the basis for this traffic operations analysis. The results of the 2015 monitoring report are therefore included in the following section to provide a more conservative baseline than the more recent monitoring data.

iv. 2015 Carmel Valley Traffic Monitoring Study

A December 3, 2015, memorandum from Ryan Chapman, Monterey County Traffic Engineer, to the Monterey County Department of Public Works documents the results of the 2015 Carmel Valley Master Plan (CVMP) Volume Report and 5th Year Update. The memorandum summarizes the same analysis scope as the more recent 2020 study described above.

Table 10 on the following page shows the ADT thresholds and the 2015 June and October daily traffic volumes for Carmel Valley Road Master Plan segments 1 through 13. Although prior to the decrease in

traffic during the Covid pandemic, 2015 Carmel Valley Road Segments all carried less than the threshold volumes specified in Carmel Valley Master Plan Supplemental Policy CV-2.17(a). Again, as described in the 2022 and 2020 monitoring reports summarized above, ADT threshold volumes will not be exceeded on any Carmel Valley Road segment with Project traffic.

Table 10
2015 Carmel Valley Road ADT Segment Thresholds

	Segment		Threshold LOS	Threshold Volume	June ADT (2015)	June ADT Exceeds Threshold?	June Reserve Capacity	October ADT (2015)	October ADT Exceeds Threshold?	October Reserve Capacity
1	CVR	CVMP Boundary - Holman Rd	C	8,487	3,128	No	5,359	3,048	No	5,439
2	CVR	Holman Rd - Esquiline Rd	C	6,835	3,536	No	3,299	3,438	No	3,397
3	CVR	Esquiline Rd - Ford Rd	D	9,065	8,216	No	849	8,201	No	864
4	CVR	Ford Rd - Laureles Grade	D	11,600	10,740	No	860	11,061	No	539
5	CVR	Laureles Grade - Robinson Cyn Rd	D	12,752	11,015	No	1,737	11,364	No	1,388
6	CVR	Robinson Cyn Rd - Schulte Rd	D	15,499	14,255	No	1,244	14,400	No	1,099
7	CVR	Schulte Rd - Rancho San Carlos Rd	D	16,340	14,642	No	1,698	16,067	No	273
8	CVR	Rancho San Carlos Rd - Rio Rd	C	48,487	19,076	No	29,411	19,117	No	29,370
9	CVR	Rio Rd - Carmel Rancho Blvd	C	51,401	23,941	No	27,460	24,767	No	26,634
10	CVR	Carmel Rancho Blvd - SR 1	C	27,839	22,413	No	5,426	22,510	No	5,329
11	CRB	Carmel Valley Rd - Rio Rd	C	33,495	10,076	No	23,419	9,728	No	23,767
12	Rio Road	Eastern Terminus - Carmel Rancho Blvd	C	6,416	711	No	5,705	702	No	5,714
13	Rio Road	Carmel Rancho Blvd - SR 1	C	33,928	11,528	No	22,400	11,437	No	22,491

Source: 2015 CVMP Annual Evaluation of Traffic Volume, Monterey County Department of Public Works, June and October 2015.

Notes:
1. ADT from Monterey County 2015 Annual CVMP Board Report.
2. Reserve Capacity: The capacity available before the threshold volume for the segment is reached.
3. CVR = Carmel Valley Road; CRB – Carmel Rancho Boulevard

According to the 2015 Carmel Valley Master Plan Volume Report and 5th Year Update, the two-lane segments of Carmel Valley Road operated with a directional Percent Time Spent Following (PTSF) of less than 85.0 except for Segment 6: Robinson Canyon Road – Schulte Road and Segment 7: Schulte Road and Rancho San Carlos Road

An 85.0 PTSF is the break point between the LOS D and LOS E level of service categories. Based on the PTSF performance measure, Segments 6 and 7 operated at an unacceptable LOS E during the AM and/or PM peak hour and all other two- lane segments on Carmel Valley Road operate at LOS D or better. **Table 11** on the following page shows the 2015 PTSF for the two-lane segments of Carmel Valley Road.

Table 11
2015 Carmel Valley Road Two-Lane Segment Levels of Service

Segment	Threshold LOS	Threshold PTSF	June 2015 Vehicles Per Hour Highest Direction	Directional HCM 2010 PTSF	LOS	Oct 2015 Vehicles Per Hour Highest Direction	Directional HCM 2010 PTSF	LOS
3 CVR Esquiline Rd - Ford Rd	D	>85	466	70.3	D	435	78.9	C
4 CVR Ford Rd - Laureles Grade	D	>85	588	76.1	D	633	77.0	D
5 CVR Laureles Grade - Robinson Cyn Rd	D	>85	662	76.6	D	839	83.8	D
6 CVR Robinson Cyn Rd - Schulte Rd	D	>85	855	**85.3**	**E**	906	**86.8**	**E**
7 CVR Schulte Rd - Rancho San Carlos Rd	D	>85	959	**87.7**	**E**	1,011	**89.2**	**E**

Source: 2015 CVMP Annual Report of Traffic Volumes (PTSF Method, HCM 2010), Monterey County Department of Public Works, June, and October 2015.

Notes:
1. LOS: Level of Service
2. PTSF: Percent Time Spent Following
3. pcphpl: passenger cars per hour per lane
4. Existing reported volume and LOS for each segment are the worst-case between the June 2015 and October 2015 counts.
5. CVR = Carmel Valley Road

Both Segments 6 and 7 are located west of Carmel Valley Ranch. As shown in **Table 2**, the project would add an estimated 1.0 vehicle trips during the AM peak hour (0.5 trips eastbound and 0.5 trips westbound) and 1.0 vehicle trips during the PM peak hour (1.0 trips eastbound and 0.0 trips westbound) to Carmel Valley Road west of Robinson Canyon Road, including Segments 6 and 7. The addition of project trips would increase the PTSF value of Segment 7 by a small fraction (less than 0.5) and would not cause segment operations to deteriorate to a lower level of service category. And the addition of project trips would not cause the volume of traffic carried on the roadway to exceed the capacity of the roadway (i.e., volume-to-capacity ratio > 1.0), and would not significantly impact Carmel Valley Road between Robinson Canyon Road and Rancho San Carlos Road.

The project trips would have minimal impact to the PTSF values shown in **Table 5** for the other two-lane segments on Carmel Valley Road. The change in PTSF resulting from the project would not cause the segment levels of service to deteriorate worse than a PTSF value of 85.0, which is the threshold value between LOS D and LOS E. Therefore, the project would not significantly impact the two-lane segments of Carmel Valley Road.

Table 12 shows that the four-lane segments (8 through 10) of Carmel Valley Road operated at LOS A or B as documented in the 2007 Carmel Valley Master Plan Traffic Study. To exceed LOS C operations, peak hour traffic volumes on Carmel Valley Road would have to at least double on most segments; or increase by at least 1,100 vehicles per hour from the volumes documented in the 2007 CVMP traffic study. Volume statistics published by Monterey County indicate traffic volumes on Carmel Valley Road have remained relatively steady over the last decade. The amount of traffic growth necessary to cause traffic operations on the four-lane segments of Carmel Valley Road to deteriorate to LOS C or worse operations has not occurred. The project would add a small amount of traffic to Carmel Valley Road during the peak commute hours and would not be at levels that would significantly impact traffic operations.

Table 12
Carmel Valley Master Plan Traffic Study 2007 Levels of Service

2007 CARMEL VALLEY MASTER PLAN TRAFFIC STUDY EXISTING TWO-LANE SEGMENT LEVEL OF SERVICE								
			AM Peak Hour			PM Peak Hour		
Segment	Threshold LOS	Two-Way Volume	PTSF	LOS	Two-Way Volume	PTSF	LOS
1 CVR	CVMP Boundary - Holman Rd	C	373	32.46	A	430	37.98	A
2 CVR	Holman Rd - Esquiline Rd	C	390	32.39	A	473	39.50	A
3 CVR	Esquiline Rd - Ford Rd	D	774	55.81	C	790	54.57	B
4 CVR	Ford Rd - Laureles Grade	D	1,114	68.00	C	1,112	66.60	C
5 CVR	Laureles Grade - Robinson Cyn Rd	D	1,074	70.00	D	1,158	68.77	C
6 CVR	Robinson Cyn Rd - Schulte Rd	D	1,445	76.42	D	1,430	74.92	D
7 CVR	Schulte Rd - RSCR	D	1,629	82.98	D	1,556	76.75	D

2007 CARMEL VALLEY MASTER PLAN TRAFFIC STUDY EXISTING FOUR-LANE SEGMENT LEVEL OF SERVICE											
				AM Peak Hour				PM Peak Hour			
Segment			Threshold LOS	Two-Way Volume	Flow Rate (pcphpl)	Density	LOS	Two-Way Volume	Flow Rate (pcphpl)	Density	LOS
8 CVR	RSCR - Rio Rd	EB	C	769	470	7.53	A	1,034	550	10.00	A
	RSCR - Rio Rd	WB	C	937	586	10.65	A	874	475	8.64	A
9 CVR	RSCR - CRB	EB	C	1,028	579	10.53	A	1,272	650	11.82	A
	RSCR - CRB	WB	C	1,273	757	13.76	B	1,098	646	11.75	B
10 CVR	CRB - SR 1	EB	C	1,106	621	11.29	B	1,030	575	11.29	B
	CRB - SR 1	WB	C	904	601	10.93	A	1,089	662	10.93	A

Source: Carmel Valley Master Plan Traffic Study, DKS Associates, July 2007.

Notes:
1. LOS: Level of Service
2. PTSF: Percent Time Spent Following
3. pcphpl: passenger cars per hour per lane
4. Density: passenger cars per mile per lane
5. CVR = Carmel Valley Road
6. RSCR = Rancho San Carlos Road
7. CRB = Carmel Rancho Boulevard

c. Highway 1 North of Carmel Valley Road

Previous traffic impact studies have determined that Highway 1 north of Carmel Valley Road operates at LOS F during peak hours.

Historically, Caltrans perceived an impact when there was any degradation in the performance measure below the cusp of LOS C/D. If a facility is currently operating at or below LOS D, then any trips added were considered to represent a potential impact. The performance measure would then need to be brought back to predevelopment conditions. While a single trip added to a degraded facility is not usually reflected in the performance measure, Caltrans reserved the ability to consider a single trip as an impact.

As shown in **Table 2**, the project is expected to contribute less than one vehicle trip during each peak hour on average to Highway 1 north of Carmel Valley Road. It would therefore not be considered to have a significant impact. With the replacement of level of service with Vehicle Miles Travelled (VMT) by California Senate Bill 743 as described later in this letter, traffic increases on Highway 1 are no longer analyzed under CEQA. These effects can be reviewed in comparison to County policies. Regardless, the addition of less than one peak hour trip is considered inconsequential based on historic County assessments of Project impacts.

d. Trip Generation Comparison

Table 13 compares trip generation for previous approved levels of development for the residential and guest unit components of the Carmel Valley Ranch project.

Table 13
Trip Generation Comparison of Previous Approved Levels of Development

	WEEKDAY TRIP GENERATION RATES						
		AM Peak Hour			PM Peak Hour		
	Daily	Inbound	Outbound	Total	Inbound	Outbound	Total
Resort Lodge Guest Units (per unit)	8.33	46%	54%	0.27	96%	4%	0.39
Residential (per unit)	7.50	25%	75%	0.60	63%	37%	0.90

		WEEKDAY TRIP GENERATION						
		Daily	AM Peak Hour			PM Peak Hour		
		Trips	Inbound	Outbound	Total	Inbound	Outbound	Total
TRIPS GENERATED BY CVR AS ORIGINALLY PROPOSED								
Residential	855 Units	6,413	128	385	513	485	285	770
Lodge Units	200 Units	1,666	25	29	54	75	3	78
TOTAL	1055 Units	8,079	153	414	567	560	288	848

TRIPS GENERATED BY CVR AS APPROVED								
Residential	400 Units	3,000	60	180	240	227	133	360
Lodge Units	100 Units	833	12	15	27	37	2	39
TOTAL	500 Units	3,833	72	195	**267**	264	135	**399**

TRIPS GENERATED BY EXISTING DEVELOPMENT								
Residential	298 Units	2,235	45	134	179	169	99	268
Lodge Units	181 Units	1,508	22	26	49	68	3	71
TOTAL	479 Units	3,743	67	160	228	237	102	339

TRIPS GENERATED BY EXISTING DEVELOPMENT PLUS PROPOSED PROJECT								
Residential	298 Units	2,235	45	134	179	169	99	268
Lodge Units	208 Units	1,733	26	30	56	78	3	81
TOTAL	506 Units	3,968	71	164	**235**	247	102	**349**

The trip generation rate calculated for the guest units (8.33 trips per unit) was utilized to estimate the historical trips generated by the resort lodge guest units. A trip generation rate of 7.50 trips per dwelling unit was utilized for the residential development. The Carmel Valley Ranch residential development consists of a mix of attached and detached housing. The trip rate of 7.50 trips per dwelling unit is the approximate average of the Institute of Transportation Engineers trip generation rate for condominium/townhouse and single-family residential uses. Also, previous traffic studies for projects in Carmel Valley have used a trip generation rate of 7.50 trips per dwelling unit to estimate the daily trips generated by single family residential development. As shown in **Table 13**, after the development of 27 additional guest units, the Carmel Valley Ranch is expected to generate fewer AM and PM peak hour trips than was originally approved. Although it is expected to generate more daily trips, most of the trips generated by the guest units are internal to the project and would not be using Carmel Valley Road, Robinson Canyon Road, or Highway 1.

4. Summary and Conclusions

1. The proposed 27-unit project would generate an estimated 225 gross trips per day with 7 trips generated during the AM peak commute hour and 11 trips during the PM peak commute hour.

2. Most of the new trip generation is anticipated to remain within the Carmel Valley Ranch complex.

3. Based on 2013 guest and arrival data for Carmel Valley Ranch, the proposed 27-unit project would generate an average of 0.70 guest departure trips per weekday during the AM peak commute hour and 1.5 guest arrival trips during the PM peak commute hour. Arrival and departure trips would use Highway 1 and Laureles Grade to access the project. In addition, a portion of the arrival and departure trips are made by shuttle between Carmel Valley Ranch and Monterey Regional Airport.

4. The project would generate an estimated 45 external trips per day, 2 external trips during the AM peak hour and 2 trips during the PM peak hour. The addition of these trips to the road network would not significantly impact existing traffic operations on Carmel Valley Road, Robinson Canyon Road, and Highway 1.

5. The project is consistent with the Carmel Valley Ranch Specific Plan. The Carmel Valley Ranch Specific Plan allows 208 guest units. The total number of guest units after the proposed project is developed would be 208 units, equal to the number of guest units allowed by the Carmel Valley Ranch Specific Plan. Mitigation measures required to mitigate Carmel Valley Ranch Specific Plan impacts have been previously identified, programmed, and applied. The mitigation for the Carmel Valley Ranch project included construction of the Robinson Canyon underpass by Carmel Valley Ranch to eliminate the left turn movement from Robinson Canyon Road to westbound Carmel Valley Road and payment of Carmel Valley Road fees. Therefore, traffic mitigation for the 27 new units has already been identified and applied. The project would not be subject to the Carmel Valley Traffic Improvement Program fee since the project's traffic impacts were previously mitigated. The project will be subject to payment of the TAMC Regional Development Traffic Impact Fee.

B. Vehicle Miles Traveled Analysis

1. Background

As mandated by California Senate Bill SB 743, effective July 1, 2020, vehicle-miles-travelled (VMT) replaced level of service to evaluate environmental impacts under CEQA. Although a draft policy has been developed, Monterey County has not adopted a formal VMT policy which would include the methodology for performing this analysis. However, Monterey County's draft VMT policy and evaluation methodology are consistent with the "Technical Advisory on Evaluating Transportation Impacts in CEQA," State of California Governor's Office of Planning and Research, December 2018 (OPR Guidelines), which provides implementation guidance for SB 743 for evaluating development proposals. The following is a discussion of project trip generation and its implications on traffic impacts and Vehicle Miles Traveled (VMT) per the draft Monterey County VMT Policy.

2. Project VMT Significance Threshold

The OPR Guidelines include criteria for determining if a development proposal will require VMT analysis or if the proposal is below the significance threshold and exempt from additional analysis. The OPR Guidelines, page 12, states, "Many local agencies have developed screening thresholds to indicate when detailed analysis is needed. Absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact."

3. Project VMT Analysis

As described in the analysis and summarized in **Table 1** above, the addition of 27 guest rooms to the lodge is estimated to generate about 45 external vehicle trips per day. This is below the 110 trips-per-day significance threshold. The proposed hotel expansion will therefore have a less-than-significant VMT impact. No additional VMT analysis is required.

Please let me know if you have any questions or need additional information. Thank you for the opportunity to assist you with this project.

Respectfully submitted,

Keith Higgins

Keith B. Higgins, PE, TE

Keith Higgins
Traffic Engineer

MEMORANDUM

Date: June 6, 2024

To: CVR HSGE LLC

From: Keith Higgins, PE, TE *Keith Higgins*

Subject: Carmel Valley Ranch Hotel Buildout, Carmel Valley, Monterey County, CA

Carmel Valley Ranch (CVR) proposes to add 27 guest units to the existing Carmel Valley Ranch Hotel. This would increase the total number of guest units at CVR from 181 units to 208 units, which is the total number of hotel rooms allowed in the most current CVR Specific Plan. This memorandum discusses the history of development and previous environmental review and associated traffic impact analysis of Carmel Valley Ranch and the extent of traffic mitigations that have already been implemented.

The application for the Carmel Valley Ranch Specific Plan (CVRSP) was submitted to the County in 1975. A Final EIR for the Specific Plan (CVRSPEIR) was adopted by the Monterey County Board of Supervisors in October 1975 with final approval in 1977. The Specific Plan allows for the development of a residential and resort lodge complex consisting of residential units, a resort lodge and guest units, golf course and clubhouse, stables and tennis facility. The CVRSP has been revised several times. Its most recent revision was adopted on October 1, 1996, which allows for the development of up to 311 residential units and 208 resort lodge guest units, in addition to the recreation and open space uses. The impact on traffic and circulation from the full buildout of the resort lodge were fully analyzed in the original CVRSPEIR.

The mitigations for the Carmel Valley Ranch project included payment of fees to construct the Robinson Canyon underpass that eliminated the left turn movement from Robinson Canyon Road to westbound Carmel Valley Road. CVR fully funded the Carmel Valley Road / Robinson Canyon Road interchange, which was beyond its responsibility for mitigation.

Carmel Valley Ranch is incorporated by reference into the Carmel Valley Master Plan and each increment of development is dependent upon conformity with the Specific Plan Amended Conditions of Approval as well as the goals and policies of the General Plan. Monterey County General Plan Policy C-1.11 requires new development to pay the Regional Traffic Impact Fee (TAMC Fee). Therefore, although the Hotel buildout more than fully mitigated its impacts within Carmel Valley, the project will be subject to payment of the Transportation Agency for Monterey County (TAMC) Regional Development Traffic Impact Fee, which was adopted in 2008. To account for the over-mitigation, the TAMC Fee could be reduced to account for the capture of hotel trips by the variety of on-site attractions. A**ttachment A**, which was conducted in 2014,

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provides a supplemental estimate of net hotel trip generation external to CVR. Page 4 and Exhibit 1 of **Attachment A** indicate that about 80% of hotel traffic remains within CVR. A net of only about 20% of hotel traffic is added to the external Carmel Valley road network. The estimate is based on the traffic interactions between the existing hotel and attractions within Carmel Valley Ranch under its current operation.

The proposed additional 27 guest units are consistent with the 208 guest units allowed by the Carmel Valley Ranch Specific Plan that has already been subject to environmental impact review and full mitigation. No further traffic analysis is required.

Please let me know if you have any questions.

Attachment A

Carmel Valley Ranch Expansion

Traffic Evaluation Memo, September 5, 2014

(Increase to 181 Hotel Rooms)

Hatch Mott MacDonald

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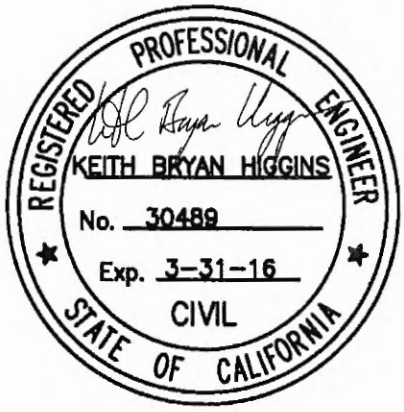

September 5, 2014

MEMORANDUM

TO: Shandell Clark

FROM: Keith Higgins, CE, TE
Dan Takacs, TE

SUBJECT: Carmel Valley Ranch Expansion

Carmel Valley Ranch proposes to add 37 guest units, which would increase the total number of guest units at the facility from 144 units to 181 units. The project will generate new vehicle trips that will add to traffic on the local and regional road networks. This memorandum discusses the history of development at Carmel Valley Ranch, the extent of traffic mitigation that have already been implemented and programmed, documents an analysis of the volume of trips that the project would potentially add to the local and regional road network and assess what traffic impact there may be beyond those which have been previously identified.

HISTORY OF DEVELOPMENT OF CARMEL VALLEY RANCH

Over the past 30 years, Carmel Valley Ranch has become a first class destination resort. Existing amenities at the Ranch include a championship golf course and clubhouse, a children's activity center, a number of pools and tennis courts, a fitness center, a full service spa, casual and fine dining restaurants, corporate meeting space, and miles of hiking trails. Unlike a single use hotel or motel, these amenities allow the guests to stay on site throughout their vacation.

To facilitate guest circulation within the resort, Carmel Valley Ranch operates a total of five (5) shuttles within the resort to transport their guests to any of the on-site amenities on a 24 hour, on-demand basis. Occupancy of the shuttles ranges between 7-12 persons. The owners also operate a fleet of five (5) golf carts that are utilized to move people (up to four persons each) and supplies throughout the resort. Carmel Valley Ranch arranges guest travel outside the resort, including the airport through a third party service.

The application for the Carmel Valley Ranch Specific Plan was submitted to the County in 1975. A Final EIR for the Specific Plan was adopted by the Monterey County Board of Supervisors in October 1975. The Carmel Valley Ranch Specific Plan was approved by the Board of Supervisors in 1977. The Specific Plan allows for the development of a residential and resort lodge complex consisting of residential units, a resort lodge and guest units, golf course and clubhouse, stables and tennis facility.

EXHIBIT E

The Carmel Valley Ranch Specific Plan has been revised several times with the most recent revision adopted on October 1, 1996. As amended in 1996, the Specific Plan allows for the development of up to 311 residential units and 208 resort lodge guest units, in addition to the recreation and open space uses.

The mitigations for the Carmel Valley Ranch project included payment of fees to construct the Robinson Canyon underpass that eliminated the left turn movement from Robinson Canyon Road to westbound Carmel Valley Road. The proposed additional 37 guest units are being constructed within the context of the development of the 208 guest units allowed by the Carmel Valley Ranch Specific Plan that has already been subject to environmental impact review and mitigation. Therefore, traffic mitigation for the 37 new units has already been identified and applied.

The project will be subject to payment of the Transportation Agency for Monterey County (TAMC) Regional Development Traffic Impact Fee, which was adopted in 2008. Carmel Valley Ranch is incorporated by reference into the Carmel Valley Master Plan and each increment of development is dependent upon conformity with the Specific Plan Amended Conditions of Approval as well as the goals and policies of the General Plan. Monterey County General Plan Policy C-1.11 requires new development to pay the Regional Traffic Impact Fee.

PROJECT TRIP GENERATION, TRIP DISTRIBUTION AND ASSIGNMENT

Project Trip Generation

A trip generation study of the existing Carmel Valley Ranch development was performed to establish trip generation rates for the facility. Traffic volume counts using machine tube counters were performed to establish the existing traffic generation of the lodge and guest units.

A machine tube counter was installed on Old Ranch Road immediately north of the lodge between Wednesday April 9, 2014 and Friday April 18, 204 to count traffic generated by the lodge and lodge units. This counter counted traffic generated by the lodge and guest units and other traffic not directly attributable to the lodge guest units. The Old Ranch Road traffic volume counts were adjusted to remove trips not directly attributable to the guest units. Besides counting traffic generated by the guest units, the Old Ranch Road traffic counter counted traffic generated by residential units located on Fairway Lane, Carmel Valley Ranch employees, delivery and service trucks and Carmel Valley Ranch guest shuttle vehicles. The following adjustments were made to the traffic counts collected on Old Ranch Road:

1. Fairway Lane – Traffic generated by residential units on Fairway Lane are not associated with the lodge and guest units. A machine tube counter was also placed on Fairway Lane to count traffic generated by developed on Fairway Lane. This traffic count was subtracted from the Old Ranch Road traffic count.
2. Employees – The project may result in an increase of one or two housekeeping employees, but these employees would be added to the weekend shifts. Otherwise, the number of employees during the week would not increase as a result of the project. Carmel Valley Ranch staff provided a count of the

employee trips during traffic count study period and the employee trips were deducted from the Old Ranch Road traffic count.

3. Carmel Valley Ranch Shuttles – Carmel Valley Ranch Shuttles operate throughout the day at the current time. The additional guest units will not materially change the volume of guest shuttle trips made during the day. Camel Valley Ranch staff provided a count of shuttle trips made during the count period and the shuttle trips were deducted from the Old Ranch Road traffic counts.
4. Security – Carmel Valley Ranch maintains a security force that patrols the grounds. The size and patrolling schedule of the force will not change as a result of the project. Camel Valley Ranch staff provided a count of security trips made during the count period and the security trips were deducted from the Old Ranch Road traffic counts.
5. Construction Activity – Traffic generated by construction work underway at the lodge at the time of the traffic counts should not be included in the trip generation rate for the guest units. Carmel Valley Ranch staff provided a count of the vehicle trips generated by construction activity at the lodge during the count period. These trips were subtracted from the Old Ranch Road traffic count.
6. Deliveries – Deliveries are made on a regularly scheduled basis to the Carmel Valley Ranch lodge. The proposed project will not change the number of deliveries made to the facility. Camel Valley Ranch staff provided a count of delivery schedule and the delivery truck trips were deducted from the Old Ranch Road traffic counts.
7. Spa – An analysis of spa usage over an approximate four month period in late 2010 and early 2011 determined that the spa generates one off-site patron per day (two vehicle trips). These trips were subtracted from the Old Ranch Road traffic volume count.

The existing trip generation for the lodge and guest units is summarized on Exhibit 1. The lodge and guest units generated an average of 39 vehicle trips during the AM peak hour and 56 vehicle trips during the PM peak hour excluding employee, shuttle, security, construction, delivery and spa trips. Based on that data it was determined that the lodge and guest units generate trips at the rate of 0.27 trips per unit during the AM peak hour and 0.39 trips per unit during the PM peak hour. The existing lodge and guest units generate an average of 1,199 daily trips per weekday, or 8.33 trips per day per guest unit.

The trip generation rates for the lodge and guest units were used to estimate the trip generation for the proposed project. As shown on Exhibit 1, the 37-unit guest room expansion would generate:

- 10 trips during the AM peak hour;
- 14 trips during the PM peak hour; and,
- 308 trips per day.

The lodge contains other uses including a restaurant that is open to the public and trips made by non-guests would be included in the traffic counts collected on Old Ranch Road. Vehicle trips generated by the restaurant and other ancillary uses within the lodge were not subtracted from the Old Ranch Road traffic counts. Therefore, the trip generation rates used to forecast the trip generation for the proposed project and the trip generation estimate for the proposed project should be considered conservative (high)

Most of the new trips generated by the expansion will be trips between the new guest units and on-site resort amenities. Carmel Valley Ranch is a resort hotel and most of the guests stay on the property after arrival. Carmel Valley Ranch estimates that the internal capture rate between the guest units and on-site amenities is 80 percent.[1] This results in an estimate of:

- 62 external trips per day,
- 2 external trips during the AM peak hour and
- 3 external trips during the PM peak hour.

External trips are trips with origins and destinations outside of the resort that would travel on Carmel Valley Road and Robinson Canyon Road to access the Ranch.

To mitigate potential project traffic related impacts to traffic, Carmel Valley Ranch proposes to re-schedule deliveries currently scheduled during the peak commute hours to hours outside of the peak hours to off-set the potential peak hour trips generated by the proposed project. On weekdays, deliveries are currently scheduled between 6 am and 10 am. Currently, 7 deliveries are scheduled during the 8 am to 9 am peak hour during the week, or an average of 1.4 deliveries per day. Re-scheduling at least 1 delivery per day to an hour outside of the AM peak hour would off-set the estimated external trip generation for the project during the AM peak hour, which is 2 vehicle trips. When the passenger-car equivalencies (pce) of a truck are considered, rescheduling at least one delivery outside of the AM peak hour would more than off-set the estimated additional external trips that the project would generate during the AM peak hour. (The passenger-car equivalency for a truck varies depending on the roadway grade, length of grade and percentage of trucks and buses in the traffic flow. On a flat roadway, the passenger-car equivalency of a truck is 1.5. On a grade of 5% with a length of three-quarters of a mile, which approximates the grade of Highway 1 north of Carmel Valley Road, the truck passenger-car equivalency would be 5.0, assuming 2% trucks/buses in the traffic flow.)

Project Trip Distribution/Assignment

The external trips generated by the guest units would consist of guest arrival and departure trips, trips to other visitor serving uses in the region and trips to commercial uses in the valley.

[1] The 80% internal capture rate of resort guests is supported by the Carmel Valley Ranch activity record between April 8, 2014 and April 18, 2014 shown on Attachment A. During the survey period, each guest unit generated about 8 guest activities per day. Activities include the spa, golf, multiple restaurants, workshops, guided hikes and horseback riding. The resort offers meeting space and multiple specially designed activities and facilities for corporate and group guests.

The following trip distribution pattern was assumed for the project:

North via Highway 1: 25%
South via Highway 1: 5%
West via Rio Road: 10%
Other destinations in Carmel Valley west via Carmel Valley Road: 10%
North via Laureles Grade: 40%
Other destinations in Carmel Valley east via Carmel Valley Road: 10%

Exhibit 2 includes a tabulation of the daily and peak hour trips that the project would add to Carmel Valley Road and other roads in the region.

The project would add an estimated 62 vehicle trips per day to Robinson Canyon Road between Old Ranch Road and Carmel Valley Road, 31 trips per day to Carmel Valley Road west of Robinson Canyon Road and 31 trips per day to Carmel Valley Road east of Robinson Canyon Road.

During the AM peak hour, the project would add an estimated 2 vehicle trips to Robinson Canyon Road between Old Ranch Road and Carmel Valley Road, 1 trip to Carmel Valley Road west of Robinson Canyon Road and 1 trip to Carmel Valley Road east of Robinson Canyon Road.

During the PM peak hour, the project would add an estimated 3 vehicle trips to Robinson Canyon Road between Old Ranch Road and Carmel Valley Road, 1.5 trips to Carmel Valley Road west of Robinson Canyon Road and 1.5 trips to Carmel Valley Road east of Robinson Canyon Road.

The project trip assignment shown on Exhibit 2 indicates that the contribution of project trips to some roadway segments will be less than 1 trip during the peak hour. The addition of trips to a roadway segment that are less than a value of one indicates that the project will add trips to the segment, but the contribution will average less than one trip day.

Most of the new trips generated by the expansion will be trips between the new guest units and on-site resort amenities, but some off-site trips would be generated that would include trips to destinations in the Valley and outside the Valley. It is anticipated that most of the trips added to the regional road network by the project will be trips associated with guest arrivals and departures.

Guest Check-in/Check-out Trips

This section of the memorandum documents an analysis of the trips that would be generated by guest check-in and check-out.

Guest check-in and check-out data for 2013 was provided by Carmel Valley Ranch. The data was compiled to show the number of guest check-ins and check-outs by time-of-day and by day-of- week for the entire 2013 year. The average number of arrivals and departures per weekday was determined from the data. Also, the average peak one-hour number of check-ins and check-outs during the AM and PM peak commute periods was

determined for 2013. Using this data, the percentage of total weekday daily check-outs that occurs during the AM peak commute hour and the percentage of total weekday daily check-ins that occurs during the PM peak commute hour were determined. The peak commute periods are between 7 am and 9 am in the morning and 4 pm and 6 pm in the afternoon. The peak commute hours are the peak one-hour of traffic during the peak commute periods. For this analysis, it was assumed that the peak one-hour of check-outs during the morning commute period and the peak one-hour of check-ins during the afternoon peak commute period coincide with the peak one-hour of traffic on the adjacent road network. The percentage of total weekday check-ins during the PM peak commute hour and the percentage of total weekday check-outs during the AM peak commute hour were used to calculate the number of check-ins and check-outs during the AM and PM peak commute hours for the new 37 guest units.

Exhibit 3 provides a summary of the calculations. Note that the existing number of check-ins during the AM peak period and the existing number of check-outs during the PM peak period are negligible. The average number of guest check-ins during the weekday AM peak hour in 2013 was 0.2 check-ins per day, or 0.002 check-ins per day per room. The average number of guest check-outs during the weekday PM peak hour in 2013 was 0.3 check-outs per day, or 0.002 check-outs per day per room. The project will not materially add to the number of check-ins that occur during the AM peak hour or to the number of check-outs that occur during the PM peak hour. Therefore, the calculations on Exhibit 2 show the estimated number of guest check-outs generated by the project during the AM peak hour and the estimated number of guest check-ins during the PM peak hour.

An explanation of the calculations is provided below:

Check Out

1. In 2013, there was an average of 41.2 check-outs per weekday.
2. The average rate of guest check-outs in 2013 was 0.29 check-outs/room/weekday.
3. The estimated guest check-outs per weekday for the 37 new guest units is 10.7 (0.29 x 37).
4. Based upon the guest check-out data provided by Carmel Valley Ranch, 9.0 percent of the daily check-outs occur during the AM peak commute hour.
5. Therefore, the estimated average number of guest peak hour check-outs per weekday for the 37-unit project is 1.0 (10.7 x 0.09).

Check In

1. In 2013, there was an average of 49.5 check-ins per weekday.
2. The average rate of guest check-ins in 2013 was 0.34 check-ins/room/weekday.
3. The estimated guest check-ins per weekday for the 37 new guest units is 12.6 (0.34 x 37).
4. Based upon the guest check-in data provided by Carmel Valley Ranch, 16.7 percent of the daily check-ins occur during the PM peak commute hour.
5. Therefore, the estimated average number of peak hour check-ins per weekday for the 37-unit project is 2.1 (12.6 x 0.167).

Based on 2013 guest and arrival data for Carmel Valley Ranch, the proposed 37-unit project would generate an average of 1.0 guest departure trips per weekday during the AM peak commute- hour and 2.1 guest arrival trips during the PM peak commute hour. Arrival and departure trips would primarily use Highway 1 and Laureles Grade to access the project.

PROJECT IMPACTS

This section of the memorandum analyzes potential project impacts to Robinson Canyon Road, Carmel Valley Road and Highway 1 north of Carmel Valley Road. The analyses shows that in context of existing traffic conditions on Carmel Valley Road and Robinson Canyon Road, the proposed 37 additional guest units would not have a significant impact to traffic operations on these roadways. However, as previously discussed the Carmel Valley Ranch Specific Plan (revised in 1996) allows the development of 208 guest units. The impact of that number of units was fully analyzed. The total number of guest units after the project is developed would still be less than the number of guest units allowed by the Carmel Valley Ranch Specific Plan.

Robinson Canyon Road

According to the Monterey County published statistics, Robinson Canyon Road between Carmel Valley Road and Holt Road carried 3,300 vehicles per day in 2013. The capacity of a two-lane collector roadway such as Robinson Canyon Road is 12,000 vehicles per day and volumes less than 6,000 vehicles per day reflect LOS A operations. Robinson Canyon Road currently operates at LOS A. With the estimated 62 external project trips added to Robinson Canyon Road, Robinson Canyon Road would carry 3,362 vehicles per day (an increase of 1.9%) and would continue to operate at LOS A. The proposed project will not significantly impact Robinson Canyon Road.

Carmel Valley Road

According to the Carmel Valley Master Plan Supplemental Policies, traffic operations on Carmel Valley Road are evaluated on the basis of two factors – 1) level of service and 2) Average Daily Traffic (ADT) thresholds. The traffic standards for the Carmel Valley Road segments are as follows:

a) LOS of "C" and ADT below its threshold specified in Policy CV-2.17(a) for Segments 1, 2, 8, 9, 10, 11, 12 and 13 is an acceptable condition;
b) LOS of "D" and ADT below its threshold specified in Policy CV-2.17(a) for Segments 3, 4, 5, 6 and 7 is an acceptable condition;

A project impact would be significant if it caused the level of service to degrade from an acceptable level of service to and unacceptable level of service or caused a facility already operating at an unacceptable LOS D or LOS E condition to deteriorate to a lower level of service value (i.e., from LOS D to LOS E or LOS F; or from LOS E to LOS F).

A June 26, 2014 memorandum from Ryan Chapman, Monterey County Traffic Engineer to the Carmel Valley Road Committee documents the results of the 2013 Carmel valley Road Annual Traffic Volume Reporting Evaluation. The memorandum includes an analysis of level of service for the two-lane segments and an analysis of the ADT thresholds for all segments. Information contained in the memorandum was referenced to assess the potential for the project to impact Carmel Valley Road.

Exhibit 4 shows the ADT thresholds and the existing (2013) daily traffic volume for the Carmel Valley Road segments. The traffic volume data contained in the table on Exhibit 43 was obtained from the 2013 Carmel Valley Master Plan Annual Evaluation of Traffic Volume. Currently, all Carmel Valley Road Segments carry less than the threshold volume specified in Carmel Valley Master Plan Policy CV-2.17(a). In addition, the reserve capacity available on each segment exceeds the total estimated trip generation for the project (308 vehicle trips). The project will add an estimated 31 trips per day to Carmel Valley Road west of Robinson Canyon Road and 31 trips per day to Carmel Valley Road east of Robinson Canyon Road. Therefore, the ADT threshold volumes specified in Policy CV-2.17(a) would not be exceeded on any Carmel Valley Road segment with the project developed.

According to the 2013 Carmel Valley Master Plan Annual Report of Traffic Volumes, all two-lane segments of Carmel Valley Road operate with a directional Percent Time Spent Following (PTSF) of less than 85.0 except the following two segments:

Segment 6: Robinson Canyon Road – Schulte Road
Segment 7: Schulte Road and Rancho San Carlos Road

An 85.0 PTSF is the break point between the LOS D and LOS E level of service categories. Based on the PTSF performance measure, Segments 6 and 7 currently operate at an unacceptable LOS E during the PM peak hour and all other two-lane segments on Carmel Valley Road operate at LOS D or better. Exhibit 5 shows the existing PTSF for the two-lane segments of Carmel Valley Road.

Both Segments 6 and 7 are located west of Carmel Valley Ranch. As shown on Exhibit 2, the project would add an estimated 1.5 vehicle trips (1.5 trips eastbound and 0.0 trips westbound) during the PM peak hour to Carmel Valley Road west of Robinson Canyon Road, including Segments 6 and 7. The addition of project trips would increase the PTSF value of Segment 7 by a small fraction (less than 0.5) and would not cause segment operations to deteriorate to a lower level of service category. And, the addition of project trips would not cause the volume of traffic carried on the roadway to exceed the capacity of the roadway (i.e., volume-to-capacity ratio > 1.0), and would not significantly impact Carmel Valley Road between Robinson Canyon Road and Rancho San Carlos.

The project trips would have minimal impact to the PTSF values shown on Exhibit 5 for the other two-lane segments on Carmel Valley Road. The change in PTSF resulting from the project would not cause the segment levels of service to deteriorate worse than a PTSF value of 85.0, which is the threshold value between LOS D and LOS E. Therefore, the project would not significantly impact the two-lane segments of Carmel Valley Road.

Exhibit 6 shows that the four-lane segments of Carmel Valley Road operated at LOS A or B as documented in the 2007 Carmel Valley Master Plan Traffic Study. To exceed LOS C operations, peak hour traffic volumes on Carmel Valley Road would have to at least double on most segments; or increase by at least 1,100 vehicles per hour from the volumes documented in the 2007 CVMP traffic study. Volume statistics published by Monterey County indicate traffic volumes on Carmel Valley Road have remained relatively steady over the last decade. The amount of traffic growth necessary to cause traffic operations on the four-lane segments of Carmel Valley Road to deteriorate to LOS

C or worse operations has not occurred. The project would add a small amount of traffic to Carmel Valley Road during the peak commute hours and would not be at levels that would significantly impact traffic operations.

Highway 1 north of Carmel Valley Road

Previous traffic impact studies have determined that Highway 1 north of Carmel Valley Road operates at LOS F during the peak hours.

The County's significance criteria for roadway segments is as follows:

> A significant impact would occur if a roadway segment operating at A through E degrades to a lower level of service of D, E, or F. If a segment is already operating at LOS F any increase during peak hour (one vehicle) is considered significant.

As shown on Exhibit 2, the project is expected to contribute less than one vehicle trip during each peak hour on average to Highway 1 north of Carmel Valley Road. Note that the project applicant proposes to reschedule at least one existing delivery trip that occurs during the AM peak hour, which would eliminate the estimated external project trip generation during the AM peak hour. With this mitigation measure, the project would not add any peak hour trips to Highway 1 during the AM peak hour and its impact would not be significant. During the PM peak hour, the project is estimated to add less than one trip per day to Highway 1 north of Carmel Valley Road. Therefore, the project's impact to Highway 1 would not be significant.

TRIP GENERATION COMPARISON

Exhibit 7 provides a comparison of trip generation for previous approved levels of development for the residential and guest unit components of the Carmel Valley Ranch project.

The trip generation rate calculated for the guest units (8.33 trips per unit) was utilized to estimate the historical trips generated by the resort lodge guest units. A trip generation rate of 7.50 trips per dwelling unit was utilized for the residential development. The Carmel Valley Ranch residential development consists of a mix of attached and detached housing. The trip rate of 7.50 trips per dwelling unit is the approximate average of the Institute of Transportation Engineers trip generation rate for condominium/townhouse and single family residential uses. Also, previous traffic studies for projects in Carmel Valley have used a trip generation rate of 7.50 trips per dwelling unit to estimate the daily trips generated by single family residential development.

SUMMARY and CONCLUSIONS

1. The proposed 37- guest unit project would generated an estimated 308 trips per day with 10 trips generated during the AM peak commute hour and 14 trips during the PM peak commute hour.
2. Most of the new trip generation is anticipated to remain within the Carmel Valley Ranch complex.

3. Based on 2013 guest and arrival data for Carmel Valley Ranch, the proposed 37-unit project would generate an average of 1.0 guest departure trips per weekday during the AM peak commute hour and 2.1 guest arrival trips during the PM peak commute hour. Arrival and departure trips would use Highway 1 and Laureles Grade to access the project. In addition, a portion of the arrival and departure trips are made by shuttle between Carmel Valley Ranch and the Monterey Airport.
4. The project would generate an estimated 62 external trips per day, 2 external trips during the AM peak hour and 3 trips during the PM peak hour. The addition of these trips to the road network would not significantly impact existing traffic operations on Carmel Valley Road, Robinson Canyon Road and Highway 1.
5. The project is consistent with the Carmel Valley Ranch Specific Plan. The Carmel Valley Ranch Specific Plan allows 208 guest units. The total number of guest units after the proposed project is developed would be 181 units, less than the number of guest units allowed by the Carmel Valley Ranch Specific Plan. Mitigation measures required to mitigate Carmel Valley Ranch Specific Plan impacts have been previously identified, programmed and applied. The mitigation for the Carmel Valley Ranch project included construction of the Robinson Canyon underpass by Carmel Valley Ranch to eliminate the left turn movement from Robinson Canyon Road to westbound Carmel Valley Road and payment of Carmel Valley Road fees. Therefore, traffic mitigation for the 37 new units has already been identified and applied. The project would not be subject to the Carmel Valley Traffic Improvement Program fee since the project's traffic impacts were previously mitigated. The project will be subject to payment of the TAMC Regional Development Traffic Impact Fee.
6. Although impacts associated with the expansion have been previously mitigated, to alleviate any potential conflicts, Carmel Valley Ranch proposes to re-schedule deliveries currently scheduled during the peak commute hours to hours outside of the peak hours to off-set the potential peak hour trips generated by the proposed project. Deliveries are currently scheduled between 6 am and 10 am. Currently, 7 deliveries are scheduled during the 8 am to 9 am peak hour during the week, or an average of 1.4 deliveries per day. Re-scheduling at least 1 delivery per day to an hour outside of the AM peak hour would off-set the estimated external trip generation for the project during the AM peak hour, which is 2 vehicle trips.

	Daily Trips	Existing Average Weekday Trip Generation					
		AM Peak Hour			PM Peak Hour		
		Inbound	Outbound	Total	Inbound	Outbound	Total
+ Old Ranch	1,998	78	55	133	90	61	151
- Fairview Drive	-288	-8	-10	-18	-13	-10	-23
- Employees / Shuttles / Security	-443	-23	-23	-46	-23	-23	-46
- Construction	-56	-28	0	-28	0	-26	-26
- Deliveries	-10	-1	-1	-2	0	0	0
- Spa	-2	0	0	0	0	0	0
Net Existing Trips - Lodge & Guest Units	1,199	18	21	39	54	2	56
Trip Generation Rates (per unit; 144 units)	8.33	46%	54%	0.27	96%	4%	0.39

	Daily Trips	Project Trip Generation					
		Inbound	Outbound	Total	Inbound	Outbound	Total
Project - 37 units	308	5	5	10	14	0	14

	Daily Trips	Project Internal / External Trips					
		Inbound	Outbound	Total	Inbound	Outbound	Total
Internal (80%)	246	4	4	8	11	0	11
External (20%)	62	1	1	2	3	0	3
Total	308	5	5	10	14	0	14

EXHIBIT 1
PROJECT
TRIP GENERATION

	Daily Trips	AM Peak Hour			PM Peak Hour		
		Inbound	Outbound	Total	Inbound	Outbound	Total
External Trips (20% of Project Trip Generation)	62	1	1	2	3	0	3
Carmel Valley Road - West (50% of External)	31.0	0.5	0.5	1.0	1.5	0.0	1.5
Highway 1 North (25% of External)	7.75	0.13	0.13	0.25	0.38	0.00	0.38
Highway 1 South (5% of External)	1.55	0.03	0.03	0.05	0.08	0.00	0.08
Rio Road / Carmel (10%)	3.10	0.05	0.05	0.10	0.15	0.00	0.15
Other Valley Destinations (10%)	3.10	0.05	0.05	0.10	0.15	0.00	0.15
Carmel Valley Road - East (50% of External)	31.0	0.5	0.5	1.0	1.5	0.0	1.5
East - Laureless Grade Rd (40%)	12.40	0.20	0.20	0.40	0.60	0.00	0.60
East - Other Destinations (10%)	3.10	0.05	0.05	0.10	0.15	0.00	0.15

EXHIBIT 3
CARMEL VALLEY RANCH GUEST UNIT EXPANSION
GUEST CHECK-IN / CHECK-OUT TRIP GENERATION

GUEST DEPARTURES DURING THE AM PEAK HOUR	
	Departures
Existing Conditions	
Existing Average Departures Per Weekday (2013)	41.2
Existing Average Departures Per Weekday Per Existing Unit (144 Units)	0.29
Percentage of Departures in the PM Peak Hour	9.0%
Project Conditions	
CVR Expansion Units (The Project)	37
Average Additional Departures Per Weekday (37 x 0.29)	10.7
Average Departures Per Weekday During the PM Peak Hour (9.0% of daily)	1.0

GUEST ARRIVALS DURING THE PM PEAK HOUR	
	Arrivals
Existing Conditions	
Existing Average Arrivals Per Weekday (2013)	49.5
Existing Average Arrivals Per Weekday Per Existing Unit (144 Units)	0.34
Percentage of Arrivals in the PM Peak Hour	16.7%
Project Conditions	
CVR Expansion Units (The Project)	37
Average Additional Arrivals Per Weekday (37 x 0.34)	12.6
Average Arrivals Per Weekday During the PM Peak Hour (16.7% of daily)	2.1

	Segment		Threshold LOS	Threshold Volume	Existing ADT (2013)	Existing ADT Exceeds Threshold	Reserve Capacity
1	Carmel Valley Road	CVMP Boundary - Holman Rd	C	8,487	3,184	No	5,303
2	Carmel Valley Road	Holman Rd - Esquiline Rd	C	6,835	3,695	No	3,140
3	Carmel Valley Road	Esquiline Rd - Ford Rd	D	9,065	8,177	No	888
4	Carmel Valley Road	Ford Rd - Laureles Grade	D	11,600	10,770	No	830
5	Carmel Valley Road	Laureles Grade - Robinson Cyn Rd	D	12,752	10,913	No	1,839
6	Carmel Valley Road	Robinson Cyn Rd - Schulte Rd	D	15,499	14,165	No	1,334
7	Carmel Valley Road	Schulte Rd - Rancho San Carlos Rd	D	16,340	15,687	No	653
8	Carmel Valley Road	Rancho San Carlos Rd - Rio Rd	C	47,487	18,695	No	28,792
9	Carmel Valley Road	Rio Rd - Carmel Rancho Blvd	C	51,401	24,240	No	27,161
10	Carmel Valley Road	Carmel Rancho Blvd - SR 1	C	27,839	21,865	No	5,974
11	Carmel Rancho Blvd	Carmel Valley Rd - Rio Rd	C	33,495	9,365	No	24,130
12	Rio	Eastern Terminus - Carmel Rancho Blvd	C	6,416	773	No	5,643
13	Rio	Carmel Rancho Blvd - SR 1	C	33,928	11,128	No	22,800

Source: 2013 CVMP Annual Evaluation of Traffic Volume, Monterey County Department of Public Works, June 26, 2014.

Notes:

1. Existing 2013 ADT from Monterey County 2013 Annual CVMP Board Report.
2. Reserve Capacity: The capacity available before the threshold volume for the segment would be reached.

EXHIBIT 4
CARMEL VALLEY ROAD
ADT SEGMENT THRESHOLDS

2013 CARMEL VALLEY MASTER PLAN ANNUAL REPORT OF TWO-LANE SEGMENT LEVEL OF SERVICE							
	Segment		Threshold LOS	Threshold PTSF	Vehicles Per Hour Highest Direction	Directional HCM 2010 PTSF	LOS
3	Carmel Valley Road	Esquiline Rd - Ford Rd	D	>85	477	74.9	D
4	Carmel Valley Road	Ford Rd - Laureles Grade	D	>85	627	72.5	D
5	Carmel Valley Road	Laureles Grade - Robinson Cyn Rd	D	>85	679	80.8	D
6	Carmel Valley Road	Robinson Cyn Rd - Schulte Rd	D	>85	757	**86.8**	**E**
7	Carmel Valley Road	Schulte Rd - Rancho San Carlos Rd	D	>85	831	**86.2**	**E**

Source: 2013 CVMP Annual Report of Traffic Volumes (PTSF Method, HCM 2010), Monterey County Department of Public Works, June 26, 2014.

Notes:

1. LOS: Level of Service
2. PTSF: Percent Time Spent Following
3. pcphpl: passenger cars per hour per lane

EXHIBIT 5
CARMEL VALLEY ROAD
TWO-LANE SEGMENT
LEVELS OF SERVICE

2007 CARMEL VALLEY MASTER PLAN TRAFFIC STUDY EXISTING TWO-LANE SEGMENT LEVEL OF SERVICE									
				AM Peak Hour			PM Peak Hour		
	Segment		Threshold LOS	Two-Way Volume	PTSF	LOS	Two-Way Volume	PTSF	LOS
1	Carmel Valley Road	CVMP Boundary - Holman Rd	C	373	32.46	A	430	37.98	A
2	Carmel Valley Road	Holman Rd - Esquiline Rd	C	390	32.39	A	473	39.50	A
3	Carmel Valley Road	Esquiline Rd - Ford Rd	D	774	55.81	C	790	54.57	B
4	Carmel Valley Road	Ford Rd - Laureles Grade	D	1,114	68.00	C	1,112	66.60	C
5	Carmel Valley Road	Laureles Grade - Robinson Cyn Rd	D	1,074	70.00	D	1,158	68.77	C
6	Carmel Valley Road	Robinson Cyn Rd - Schulte Rd	D	1,445	76.42	D	1,430	74.92	D
7	Carmel Valley Road	Schulte Rd - Rancho San Carlos Rd	D	1,629	82.98	D	1,556	76.75	D

2007 CARMEL VALLEY MASTER PLAN TRAFFIC STUDY EXISTING FOUR-LANE SEGMENT LEVEL OF SERVICE											
					AM Peak Hour				PM Peak Hour			
	Segment			Threshold LOS	Two-Way Volume	Flow Rate (pcphpl)	Density	LOS	Two-Way Volume	Flow Rate (pcphpl)	Density	LOS
8	Carmel Valley Road	Rancho San Carlos Rd - Rio Rd	EB	C	769	470	7.53	A	1,034	550	10.00	A
		Rancho San Carlos Rd - Rio Rd	WB	C	937	586	10.65	A	874	475	8.64	A
9	Carmel Valley Road	Rio Rd - Carmel Rancho Blvd	EB	C	1,028	579	10.53	A	1,272	650	11.82	A
		Rio Rd - Carmel Rancho Blvd	WB	C	1,273	757	13.76	B	1,098	646	11.75	B
10	Carmel Valley Road	Carmel Rancho Blvd - SR 1	EB	C	1,106	621	11.29	B	1,030	575	11.29	B
		Carmel Rancho Blvd - SR 1	WB	C	904	601	10.93	A	1,089	662	10.93	A

Source: *Carmel Valley Master Plan Traffic Study* , DKS Associates, July 2007.

Notes:

1. LOS: Level of Service
2. PTSF: Percent Time Spent Following
3. pcphpl: passenger cars per hour per lane
4. Density: passenger cars per mile per lane

EXHIBIT 6
CARMEL VALLEY MASTER PLAN
TRAFFIC STUDY
LEVELS OF SERVICE

	WEEKDAY TRIP GENERATION RATES						
		AM Peak Hour			PM Peak Hour		
	Daily	Inbound	Outbound	Total	Inbound	Outbound	Total
Resort Lodge Guest Units (per unit)	8.33	46%	54%	0.27	96%	4%	0.39
Residential (per unit)	7.50	25%	75%	0.60	63%	37%	0.90

		WEEKDAY TRIP GENERATION						
		Daily	AM Peak Hour			PM Peak Hour		
		Trips	Inbound	Outbound	Total	Inbound	Outbound	Total
TRIPS GENERATED BY CVR AS ORIGINALLY PROPOSED								
Residential	855 Units	6,413	128	385	513	485	285	770
Lodge Units	200 Units	1,666	25	29	54	75	3	78
TOTAL	1055 Units	8,079	153	414	567	560	288	848
TRIPS GENERATED BY CVR AS APPROVED								
Residential	400 Units	3,000	60	180	240	227	133	360
Lodge Units	100 Units	833	12	15	27	37	2	39
TOTAL	500 Units	3,833	72	195	267	264	135	399
TRIPS GENERATED BY EXISTING DEVELOPMENT								
Residential	311 Units	2,333	47	140	187	176	104	280
Lodge Units	144 Units	1,200	18	21	39	54	2	56
TOTAL	455 Units	3,533	65	161	226	230	106	336
TRIPS GENERATED BY EXISTING DEVELOPMENT PLUS PROPOSED PROJECT								
Residential	311 Units	2,333	47	140	187	176	104	280
Lodge Units	181 Units	1,508	22	26	49	68	3	71
TOTAL	492 Units	3,841	69	166	236	244	107	351

ATTACHMENT A
CARMEL VALLEY RANCH WEEKDAY GUEST ACTIVITY
April 9, 2014 - April 18, 2014

	Resort Guest's Patronage of On-Site Activities									Average Per Day
	Wed April 9	Thu April 10	Fri April 11	Mon April 14	Tue April 15	Wed April 16	Thu April 17	Fri April 18	Total	
Food & Beverage										
Restaurants/Café [1]	356	354	642	797	995	866	772	868	5,650	706
Banquets	164	113	6	14	0	0	135	13	445	56
Total Food & Beverage	520	467	648	811	995	866	907	881	6,095	762
Golf Rounds	8	31	43	125	33	105	45	52	442	55
Spa Appointments	8	12	31	34	17	18	19	29	168	21
Other Resort Activities [2]	30	32	30	54	90	79	128	65	508	64
Total All Activities	566	542	752	1,024	1,135	1,068	1,099	1,027	7,213	902
Occupied Rooms-Total	63	77	118	125	118	122	121	128	872	109
Total Guest Activities Per Occupied Room	9.0	7.0	6.4	8.2	9.6	8.8	9.1	8.0	8.3	8.3

Source: Carmel Valley Ranch

Notes:

1. Restaurants / Café includes Lodge Restaurant, River Ranch Café, Clubhouse and Banquets.
2. Activities within the Ranch that require reservations. (i.s., guided hikes, kids camp, workshops and tennis lessons).