



MEMORANDUM

Date: November 14, 2023
To: David Athey, City of Paso Robles
From: Michelle Matson and Joe Fernandez, CCTC
Subject: **Buena Vista Vineyard Transportation Impact Analysis**

This memorandum summarizes the transportation impact analysis for the Buena Vista Vineyard development located on Buena Vista Drive within the City of Paso Robles. The project consists of 200 bungalow and hotel units, lounges, spa and medical suites, wedding pavilion, two wine tasting operations, a restaurant, tennis courts, pool, lakes, and a conference/meeting center. The project vicinity map is shown in **Figure 1**.

TRANSPORTATION ANALYSIS SUMMARY

The project will generate 1,975 daily vehicle trips, 171 AM peak hour trips and 208 PM peak hour trips under weekday conditions assuming occupancy of the conference/meeting center. The project would have a less-than-significant impact on vehicle miles traveled (VMT).

The project would not significantly impact intersection operations based on City and Caltrans criteria. The eastbound left turn queue at State Route 46 East (SR 46 E)/Buena Vista Drive (#1) would encroach into the 60 MPH deceleration area under Existing Plus Project Conditions during the AM peak hour. The queue would not spill back into the through lanes and is not expected to result in a safety issue. Regional improvements including dual eastbound left turn lanes at SR 46 E/Buena Vista Drive (#1) are included in the City's Development Impact Fees.

At the southern public access, we recommend moving the driveway directly across from an existing driveway on the east side. At the northern access, we recommend the existing easement and proposed service and delivery entrance be moved 200 feet south of the 90-degree curve on Buena Vista Drive.

We also recommend an OM1-3 object marker be added below and on the same post as the existing arrow (W1-6) signs within the curve on Buena Vista Drive.

The following sections summarize the trip generation, California Environmental Quality Act (CEQA) analysis, site access and circulation, and a local transportation analysis.

TRIP GENERATION

The Institute of Transportation Engineers' (ITE) *Trip Generation Manual* 11th Edition was used to estimate project trip generation. The resort hotel land use provides trip rates per room which includes trips from ancillary facilities such as a restaurant, lounge, and retail shops, and guest services. The ITE sites used to develop the resort hotel land use did not have convention facilities.

Facilities within the hotel building were assumed to be included in the resort hotel land use. On weekdays, the restaurant and wine tasting adjacent to Buena Vista Drive and the conference center would attract trips from the community as well as hotel guests. Wedding events were not considered since the analysis focuses on weekday conditions. **Table 1** summarizes the project trip generation.

Figure 1: Project Vicinity Map



Table 1: Trip Generation

Trip Generation									
Land Use	Size		Daily	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out	Total
Resort Hotel ¹	205	rooms	1,138	48	18	66	36	48	84
Event Centers ²	4.0	KSF	232	83	8	91	8	83	91
Wine Tasting ³	6.0	KSF	276	6	6	12	6	6	12
Restaurant ⁴	5.0	KSF	419	3	1	4	26	13	39
Restaurant Internal Trips ⁵			-90	-1	-1	-2	-12	-6	-18
Net New Trips (External)			1,975	139	32	171	64	144	208

KSF = Thousand Square Feet; ITE = Institute of Transportation Engineers; LU = Land Use.

1. ITE LU Code #330, Resort Hotel. Average rates used. Daily estimated from #310, Hotel average rates.

2. Assumed up to 267 attendees with 50% staying on-site at the hotel. Assumed 1.6 vehicle occupancy for weekday professional events. Assumed 10% of off-site trips would be dropped off. Assumed additional 50 daily trips for staff and vendors.

3. LU = Wineries - Wine tasting rooms. SLO County Board and Department Approved Trip Generation Rate used for AM and PM. ITE LU Code #970, Wine Tasting Room. Average rate used for daily trips.

4. ITE LU Code #931, Fine Dining Restaurant. Average rates used.

5. Internal trips assumed based on PM peak hour pass-by rate of LU #931 Fine Dining. Daily assumed to be 5 times the PM peak

Source: ITE Trip Generation Manual, 11th Ed. and Trip Generation Handbook, 3rd Ed.

The project will generate 1,975 daily vehicle trips, 171 AM peak hour trips and 208 PM peak hour trips. The trip distribution is shown in **Figure 2**.

CEQA ANALYSIS

This section presents analysis relevant to the California Environmental Quality Act (CEQA), notably analysis of the existing setting, vehicle miles traveled (VMT), emergency access, and safety.

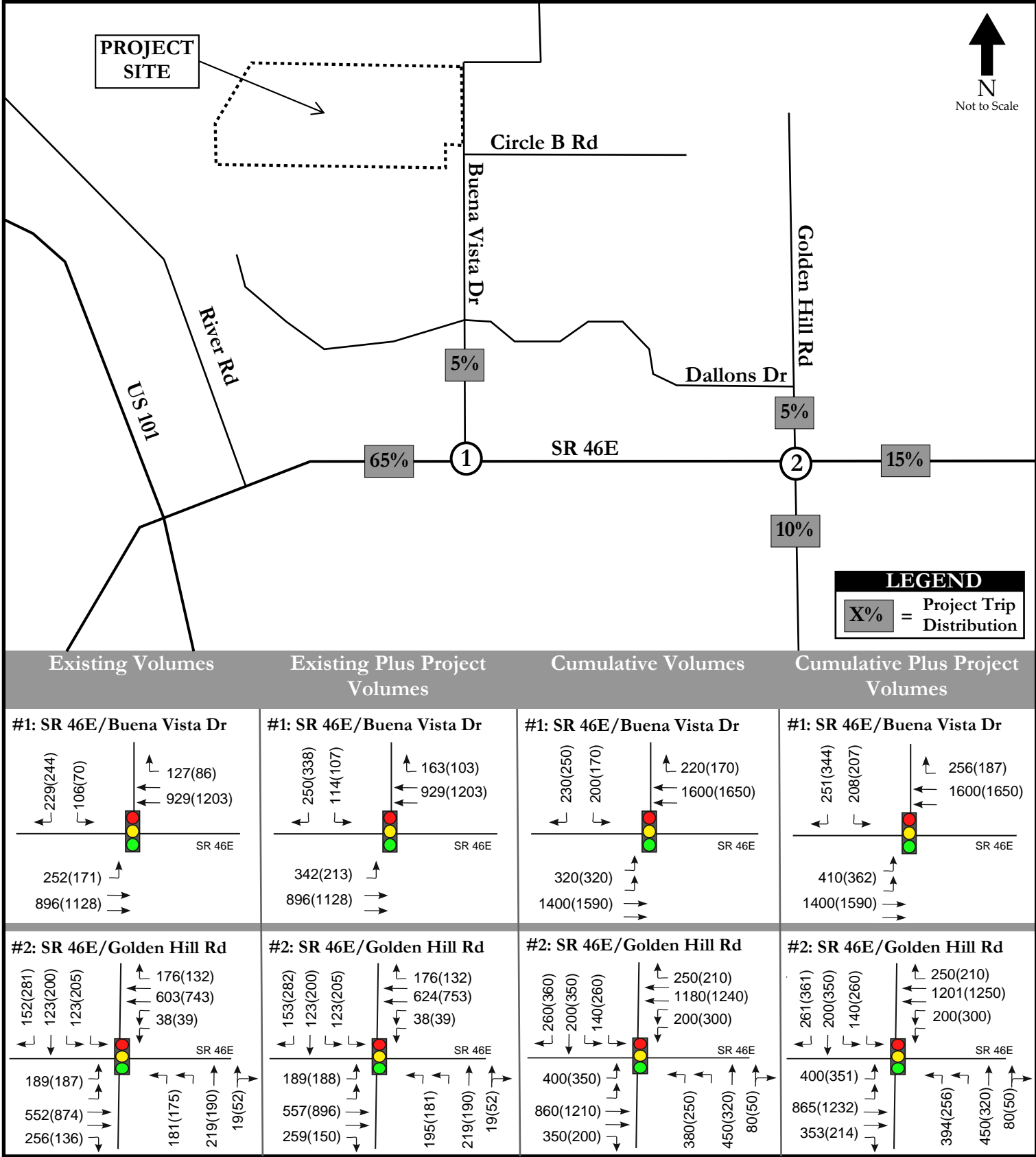
Existing Setting

The existing roadways in the vicinity of the project include:

- *Buena Vista Drive* is a north-south arterial with two travel lanes north of SR 46 E. There are intermittent Class II bike lanes and sidewalks on both sides of the road with no on-street parking.
- *Dallons Drive* is an east-west arterial with two travel lanes. There are intermittent Class II bike lanes and sidewalks with no on-street parking.
- *Golden Hill Road* is a north-south arterial with four travel lanes between Mesa Road and Dallons Drive. There are intermittent Class II bike lanes and sidewalks on both sides of the road with no on-street parking.
- *State Route 46 East (SR 46 E)* is an east-west expressway with four travel lanes near the project site.

The County's Bikeway Plan does not include any bike facilities on Buena Vista Drive. However, the City's Bicycle and Pedestrian Master Plan includes Class II bike lanes ending at the 90-degree curve at the northeast corner of the site. It also proposes adding a Class III bike route on Buena Vista Drive north of the 90-degree curve.

Figure 2: Trip Distribution and Volumes



Buena Vista Vineyard, Paso Robles

Vehicle Miles Traveled (VMT)

The City's 2022 *Transportation Impact Analysis Guidelines Supplement* provides thresholds for vehicle miles traveled (VMT) impact analysis. Hotel projects may have a significant impact if they cause a net increase in regional VMT. This threshold is consistent with guidance from the state Office of Planning and Research (OPR) as well as the County of San Luis Obispo's thresholds. The County developed an excel-based quick-response tool which was applied using a neighboring parcel's APN for this project since it borders the County, and the City uses the identical threshold for this land use. The tool shows that the project would reduce regional VMT, which is considered a less-than-significant impact. The tool's output sheet is included in **Attachment C**.

Emergency Access

The project proposes two access points, and the emergency access is adequate as proposed.

Collision Analysis

CCTC obtained traffic collision data for 2018 through 2022 from the Statewide Integrated Traffic Records System (SWITRS) and Caltrans Traffic Accident Surveillance and Analysis System (TASAS). The collision history on Buena Vista Drive and at the study intersections is summarized below:

- Buena Vista Drive (North end of project site to 250' north of SR 46 E):
 - Two collisions were reported near the 90-degree curve. Both collisions were hit object, property damage only, occurring with northbound drivers.
 - One driving under the influence solo vehicle collision occurred north of Experimental Station Road.
 - One broadside collision due to improper turning occurred south of Experimental Station Road
- SR 46 E & Buena Vista Drive (#1):
 - The collision rate is higher than the state average rate for fatal and total collisions.
 - 60 percent of collisions are rear end with the majority due to unsafe speed.
 - 20 percent of collisions were sideswipe.
 - One fatality occurred in 2019 between an eastbound left turning vehicle and a westbound vehicle proceeding straight.
- SR 46 E & Golden Hill Road (#2):
 - The collision rate is higher than the state average rate for injury and total collisions.
 - More than 50 percent of collisions are due to unsafe speed and all other factors, individually, account for ten percent or less of total collisions.
 - Approximately 60 percent of collisions were rear end and approximately 25 percent were broadside.

No study intersections were included in the City's Local Road Safety Plan high incident locations. However, the Plan does not evaluate Caltrans-controlled facilities like SR 46 E. Caltrans' SR 46 Corridor System Management Plan reports that the SR 46 between US 101 and Airport Road experiences collision rates higher than the statewide average at both the segment and intersection level. Therefore, the corridor is considered a high-priority safety location.

SITE ACCESS AND CIRCULATION

Public access to the site is proposed on Buena Vista Drive, a County maintained road. Secondary emergency vehicle access and service access is proposed at the north end of the site at an existing access road. The service

and delivery road connection is currently skewed, based on the site plan, and we recommend that it is constructed orthogonal.

The project will need an encroachment permit from the County of San Luis Obispo Public Works Department for improvements to existing driveways or new driveways on Buena Vista Drive. Both proposed access points are located closer than 200 feet to an adjacent driveway, which does not meet County standards for arterial and collectors and a Design Exception will be required.

At the southern public access, we recommend moving the driveway directly across from an existing driveway on the east side.

At the northern access, there is currently an easement for another parcel west of the site. During development review for the parcel, the County required that the applicant “shall provide evidence to the County of SLO that they have pursued easement access rights to the private road to the north for a shared access. Additionally, if the property(ies) to the north pursue an amended/new Use Permit from the County, the County’s objective will be to provide recommended conditions that those property(ies) grant an easement to Outward Stays for purposes that the “private” Buena Vista Drive be a shared access. If that is accomplished, the use of currently proposed primary entrance will be abandoned by Outward Stays.”

The landowner of the private road north of the easement does not want to provide access rights at this time. We recommend the existing easement and proposed service and delivery entrance be moved 200 feet south of the 90-degree curve. We also recommend an OM1-3 object marker be added below and on the same post as the existing arrow (W1-6) signs within the curve on Buena Vista Drive.

LOCAL TRANSPORTATION ANALYSIS

The following sections summarize the existing traffic volumes, and existing and cumulative intersection operations with full project buildout.

Existing Traffic Volumes

Turning movement counts were collected on October 5th, 2023, at the intersection of SR 46E/Buena Vista Drive (#1) and SR 46E/Golden Hill Road (#2) during the weekday AM and PM peak hours. The turning movement counts are provided as **Attachment A**. The existing volumes and lane configurations are shown on **Figure 2**.

The turning movement counts were compared to July 2021 counts obtained for other area traffic studies. The October 2023 total entering intersection volume was approximately 19 percent more in the AM peak hour and one percent less in the PM peak hour, compared to 2021 counts, for the intersection of SR 46E/Buena Vista Drive (#1). For the intersection of SR 46E/Golden Hill Road (#2), there was a six percent increase in the AM peak hour and a seven percent decrease in the PM peak hour compared to 2021.

Existing Plus Project Intersection Operations

The study intersections were analyzed using Synchro 11 and the Highway Capacity Manual (HCM) methodologies. **Table 2** presents the intersection level of service (LOS) with and without the project and **Table 3** presents the 95th percentile queues. The Synchro output sheets are included in **Attachment B**. The Existing Plus Project volumes are shown in **Figure 2**.

Table 2: Existing and Existing Plus Project Levels of Service

Existing and Existing Plus Project Intersection Levels of Service					
Intersection	Weekday Peak Hour	Existing (EX)		EX + Project	
		Delay¹	LOS	Delay¹	LOS
1. SR 46 E/Buena Vista Dr	AM	19.2	B	22.0	C
	PM	12.4	B	16.1	B
2. SR 46 E/Golden Hill Rd	AM	23.0	C	23.6	C
	PM	26.9	C	27.4	C
1. HCM 2000 (#1) and HCM 6th (#2) average control delay in seconds per vehicle.					

All study intersections operate acceptably under existing conditions with and without the addition of project traffic.

Table 3: Existing and Existing Plus Project Queues

Existing and Existing Plus Project Queues					
Intersection	Movement	Storage Length (ft)	Weekday Peak Hour	95th Percentile Queues ¹ (ft)	
				Existing (EX)	EX + Project
1. SR 46 E/Buena Vista Dr	EBL ²	345	AM	300	#499
			PM	196	262
	SBL	450	AM	144	154
			PM	100	152
2. SR 46 E/Golden Hill Rd	EBL ²	225	AM	132	134
			PM	130	131
	WBL ²	125	AM	34	35
			PM	39	39
	NBL	160	AM	127	136
			PM	124	128
	SBL	140	AM	93	94
			PM	141	142
	SBT	395	AM	155	160
			PM	230	233
1. Queue length that would not be exceeded 95 percent of the time. # shows that volume exceeds capacity.					
2. Deceleration length of 530 feet has been subtracted from the storage length per the Highway Design Manual for 60 mph design speed.					
Bold indicates queue length longer than storage length.					

The project would increase queues in the eastbound left turn lane at SR 46 E/Buena Vista Drive (#1) under existing conditions with the addition of project traffic. Although the 95th percentile queue would exceed storage using a 60 mile per hour deceleration length, it would not exceed storage with a 40 miles per hour deceleration length. Queues would not spill back to the SR 46E through lanes. The project will pay its fair share for an additional eastbound left turn lane through payment of the City's Development Impact Fees.

Cumulative Intersection Operations

Cumulative Conditions (2045) represent build-out of the land uses in the region, as per the City's General Plan. This scenario includes traffic from approved and pending projects in the City. The Cumulative baseline volumes

were obtained from recent traffic studies. Based on the City's Circulation Element, a new eastbound left turn lane at SR 46E/Buena Vista Drive (#1) is planned and was assumed under Cumulative Conditions.

Under Cumulative Conditions a PHF of 0.92 was used for the analysis. However, if the existing PHF exceeded this value the higher PHF was used. **Table 4** presents the LOS with and without the project and **Table 5** presents the queues. The Synchro output sheets are included in **Attachment B**. The Cumulative and Cumulative Plus Project volumes are shown on **Figure 2**.

Table 4: Cumulative and Cumulative Plus Project Levels of Service

Cumulative and Cumulative Plus Project Intersection Levels of Service					
Intersection	Weekday Peak Hour	Cumulative (CM)		CM + Project	
		Delay ¹	LOS	Delay ¹	LOS
1. SR 46 E/Buena Vista Dr	AM	23.4	C	26.9	C
	PM	19.3	B	23.1	C
2. SR 46 E/Golden Hill Rd	AM	64.1	E	66.2	E
	PM	66.8	E	68.7	E
1. HCM 2000 (#1) and HCM 6th (#2) average control delay in seconds per vehicle.					

The addition of project traffic would cause the LOS to change from B to C for the SR 46E/Buena Vista Drive (#1) intersection during the PM peak hour. During both peak hours, SR 46E/Golden Hill Road (#2) would operate at LOS E with and without the addition of project traffic.

Table 5: Cumulative and Cumulative Plus Project Queues

Cumulative and Cumulative Plus Project Queues					
Intersection	Movement	Storage	Weekday Peak	95th Percentile Queues ¹ (ft)	
		Length (ft)	Hour	Cumulative (CM)	CM + Project
1. SR 46 E/Buena Vista Dr	EBL ²	345	AM	#160	#240
			PM	#166	#198
	SBL	450	AM	#273	#288
			PM	#204	#262
2. SR 46 E/Golden Hill Rd ²	EBL ²	225	AM	#330	#330
			PM	#292	#293
	WBL ²	125	AM	144	145
			PM	#256	#256
	NBL	160	AM	#274	#290
			PM	#185	#193
	SBL	140	AM	#153	#153
			PM	#231	#231
	SBT	395	AM	#306	#306
			PM	#455	#455

1. Queue length that would not be exceeded 95 percent of the time. # shows that volume exceeds capacity.

2. Deceleration length of 530 feet has been subtracted from the storage length per the Highway Design Manual for 60 mph design speed.

Bold indicates queue length longer than storage length.

There are no queue deficiencies under Cumulative Conditions with and without the addition of project traffic at SR 46 E/Buena Vista Drive (#1). At SR 46 E/Golden Hill Road (#2), all left turn queue length exceed storage in both peak hours; however, the project does not significantly increase the queues.

Please let us know if you have any questions.

ATTACHMENTS

Attachment A: Turning Movement Counts

Attachment B: Synchro Output Sheets

Attachment C: VMT Tool Results

REFERENCES

California Department of Transportation. May 2020. Vehicle Miles Traveled-Focused Transportation Impact Study Guide.

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