Kimley»Horn

Memorandum

To: Nico Turek
Topos Ventures, LLC

From: Stephen Dillon, P.E.

Re: *Yosemite Gold Country Lodge*
DRAFT Traffic Assessment

Date: July 26, 2024

The purpose of this memorandum is to document the transportation assessment completed for the Yosemite Gold Country Lodge project (the "proposed project" or "project") located at 10407 SR-49 in Coulterville, California. Based on project pre-application comments received from Caltrans[1], this memorandum evaluates and documents the anticipated traffic operations of the project.

Project Understanding

Kimley-Horn understands that the Client desires to redevelop the existing, vacated motel located at 10407 SR-49 in Coulterville, California. The project site plan is shown in **Exhibit 1**. According to the information provided, the following is an overview of the project:

- Remove existing, vacant motel buildings on the project site
- Construct pads/spaces for 26 park model recreational vehicles (RVs)
    - Includes 1 pad/space for the facility manager's quarters
- Construct on-site amenities for project guests (bathhouse/sauna, pavilion, lounge, etc.)

Study Facilities and Analysis Methodology

Study Facilities
Exhibit 2 shows the location of the project site with respect to the general study area, anticipated project driveway traffic control, and lane geometry. This traffic assessment was completed for the following facility:

Intersections
1. SR-49 at Project Driveway

Corner Sight Distance (CSD)
Sight distance was evaluated for the unsignalized parking lot driveway leg based on current horizontal and vertical geometric conditions. In the absence of explicit County standards, this evaluation was performed in accordance with the Caltrans Highway Design Manual (HDM)[2]. Per the HDM, for unsignalized intersections, the corner sight distance is "determined by the equation: $1.47V_mT_g$, where V_m is the design speed (mph) of the major road and T_g is the time gap (seconds) for the minor road vehicle to enter the major road." As the RV units on-site will be "park model" and function as motel/hotel units, passenger vehicle parameters are used as the critical basis for this assessment. Based on Table 405.1A[2], the standard Corner Sight Distance (CSD) time gap for a passenger car at an unsignalized public road intersection is 6.5 seconds for a right-turn or crossing maneuver from a stop and 7.5 seconds for a left-turn from a stop. Satisfying the CSD time gap is desired for unsignalized intersections.

[1] *Pre-Application Review No. 2023-166*, Gregoria Ponce', Caltrans, February 14, 2024.
[2] Chapter 400, Topic 405.1 Intersection Design Standards – Sight Distance, *Highway Design Manual*, Caltrans, May 20, 2022.

Assessment of Proposed Project

Trip Generation

The number of trips anticipated by the proposed project was approximated using data included in the *Trip Generation Manual, 11th Edition*, published by the Institute of Transportation Engineers (ITE). Based on the anticipated project operational characteristics, ITE Land Use Codes 320 (Motel) and 310 (Hotel) were used to estimate trips generated by the project. Table 1 presents the project trip generation estimate. As shown, the project is anticipated to generate 65 daily weekday trips, with 21 trips during the weekday AM peak-hour, 13 trips during the weekday PM peak-hour, and 24 trips during the Saturday peak-hour.

Table 1 – Proposed Project Trip Generation

Land Use (ITE Code)	Size	Units	Weekday Trips	Weekday AM Peak-Hour					Weekday PM Peak-Hour					Saturday Peak-Hour**				
				Total Trips	In		Out		Total Trips	In		Out		Total Trips	In		Out	
					%	Trips	%	Trips		%	Trips	%	Trips		%	Trips	%	Trips
Motel (320)*	26	Rooms	65	21	41%	8	59%	13	13	55%	7	45%	6	24	56%	13	44%	11

Source: Trip Generation Manual, 11th Edition, ITE

**Park model recreational vehicles expected to function as Motel rooms*

***Using data for ITE Land Use Code 310 (Hotel) due to lack of available data for ITE Land Use Code 320 (Motel)*

Data Collection

To establish Existing (2024) roadway conditions on SR-49, 24-hour roadway segment traffic counts were collected proximate to the proposed project driveway on a typical weekday and a typical Saturday in July 2024. Local traffic on SR-49 during July 2024 was deemed representative of "peak" conditions based on a review of available Caltrans traffic census data[3] and the project's proximity to regional schools. The 24-hour roadway segment counts include information on speed and vehicle classification for SR-49. The July 2024 roadway segment data is included in Attachment A.

Access and Safety Evaluation

Minimum Required Throat Depth (MRTD)

The MRTD was determined for the proposed site parking lot driveways based on methodology presented by the Institute of Transportation Engineers (ITE)[4]. The methodology uses traffic volumes approaching the side-street stop control (project trips), conflicting volumes for turns from the minor street, and percentages of left-turn and right-turn movements to determine the MRTD. The project driveway was evaluated as a Full-Access driveway. The MRTD calculations apply a peak-hour factor (PHF) of 0.92 to the Approach Volumes and a PHF of 0.7 to the Conflicting Roadway volumes. As shown in Table 2, the throat depth is sufficient as measured from the SR-49 edge to the internal driveway curb return.

Table 2 – Minimum Required Throat Depth

Driveway	Peak-Hour	Approach Volume	ConflVol (Left)	ConflVol (Right)	RT Out	Minimum Required Throat Depth (MRTD)	Available Storage
Project Dwy at SR-49	Weekday AM	14	51	16	7	**25**	**65**
	Weekday PM	7	83	60	3	**25**	
	Saturday Midday	12	110	56	6	**25**	

[3] *Traffic Census Program – 2022 AADT/Peak-Hour Data,* Caltrans, accessed July 1, 2024.

[4] *Estimation of Maximum Queue Lengths at Unsignalized Intersections*, ITE Journal, November 2001.

Site Access, Circulation, and Parking

Vehicles will access the site parking lot via one (1) unsignalized driveway on SR-49 on the northeast part of the site. The driveway will provide sufficient width for two (2) lanes (one inbound, one outbound). The site configuration provides sufficient space for the vehicle types anticipated to access the parking area. The circulation pattern shown in **Exhibit 1** is anticipated to be sufficient in accommodating emergency vehicle access and circulation for all reasonable vehicle types. Instances of vehicles larger than a private automobile utilizing the parking lot are anticipated to be infrequent.

As shown in **Exhibit 1**, the parking lot will accommodate 33 parking spaces. As the project is anticipated to operate similar to a motel/hotel, Mariposa County Code Section 17.336.030 requires one (1) space for each unit, plus two (2) additional spaces. Application of this standard results in 28 required spaces for the project. Accordingly, it is concluded that the project provides sufficient on-site parking to accommodate anticipated demand and satisfy the County code.

Driveway Sight Distance

As the driveway will be full-access, the Corner Sight Distance (CSD) time gap is evaluated looking left and looking right from the proposed driveway location to account for all egressing maneuvers. Time gap data was collected at the proposed driveway location during a site visit on July 16, 2024. **Table 3** compares the required and observed corner sight distance time gaps on SR-49. As shown in **Table 3**, the observed time gap looking left from the project driveway does not meet the desired CSD time gap.

The Stopping Sight Distance (SSD) represents the absolute minimum sight distance that should be provided. The posted speed limit on SR-49 along the project frontage is 55 MPH resulting in an assumed design speed of 60 MPH. Per Table 201.1[5], the required SSD for a 60 MPH design speed is 580-feet. Prevailing 85th-percentile speeds were obtained for weekday and Saturday conditions from roadway segment data collected proximate to the project site in July 2024. The weekday total segment 85th-percentile speed was 64 MPH and the Saturday total segment 85th-percentile speed was 62 MPH. To provide a conservative assessment, the weekday speed of 64 MPH is used for the V_m value in the SSD calculations. Observed SSD values were calculated using the equation $1.47V_mT_g$ and field data. As shown in **Table 3**, the observed SSD in both directions at the project driveway satisfies the required SSD.

Table 3 –Sight Distance Evaluation

Intersection	Direction	Condition	Corner Sight Distance	Stopping Sight Distance
			Avg Time Gap (s)	Distance (ft)
SR-49 at Project Driveway	Looking Left	Required[1]	7.5	580
		Observed	6.7	630[2]
	Looking Right	Required[1]	7.5	580
		Observed	10.3	965[2]

Acceptable | Deficient

[1]Per Caltrans Highway Design Manual, Table 405.1A and Table 201.1

[2]Prevailing speed of 64 MPH per roadway segment speed data, July 2024.

[5] Chapter 200, Topic 201 Sight Distance, *Highway Design Manual*, Caltrans, July 1, 2020.

Safety Evaluation

On July 15, 2024 Kimley-Horn submitted a public records request to Caltrans for six years (January 1, 2017 to December 31, 2023) of Traffic Accident Surveillance and Analysis Systems (TASAS) crash data on SR-49 in Mariposa County between MPA 45.00 and MPA 47.00 to provide a conservative capture of existing safety conditions proximate to the project site. Based on the collision report provided by Caltrans[6], there were two collisions on SR-49 between the requested mile markers. The crashes were both Property Damage Only (PDO) with "Other than Driver" deemed to be the primary crash factor. The Caltrans report[6] concludes that the total rate of crashes on the examined SR-49 roadway segment is below the statewide average for similar facilities.

Design Vehicle Turning Movements

Recreational vehicle (RV) turning movements were developed for all relevant project movements at the study facility included in this report. These turning movements are provided in **Attachment B.** Although the anticipated project characteristics do not include consistent RV traffic, the proposed driveway improvements shown in **Attachment C** will adequately accommodate RVs accessing the project site to establish the project lodging facilities. Improvements shown in **Attachment C** should conform to Caltrans standards for access onto a state highway per the HDM.

Conclusions

Based on the analysis provided herein, the following actions are recommended:

- The project is anticipated to generate 65 daily weekday trips. The project is anticipated to generate 21 trips during the weekday AM peak-hour, 13 trips during the weekday PM peak-hour, and 24 trips during the Saturday peak-hour.
- The project provides sufficient throat depth to allow for safe and efficient on-site operations.
- The project site plan provides sufficient access and circulation to convey reasonably anticipated vehicle types. The project provides a sufficient number of on-site parking spaces per the applicable County code.
- The project driveway does not meet desired Caltrans HDM Corner Sight Distance time gap standards looking left per field observations. The project driveway does meet minimum Caltrans HDM Stopping Sight Distance standards for all movements based on field observations and collected roadway segment speed data on SR-49.
- Per data provided by Caltrans, the roadway segment of SR-49 proximate to the project site exhibits a crash rate below the statewide average for similar facilities. The project is not anticipated to significantly alter this existing condition.
- Based on the generated turning movements, the project site and associated driveway improvements will adequately accommodate recreational vehicles (RVs).

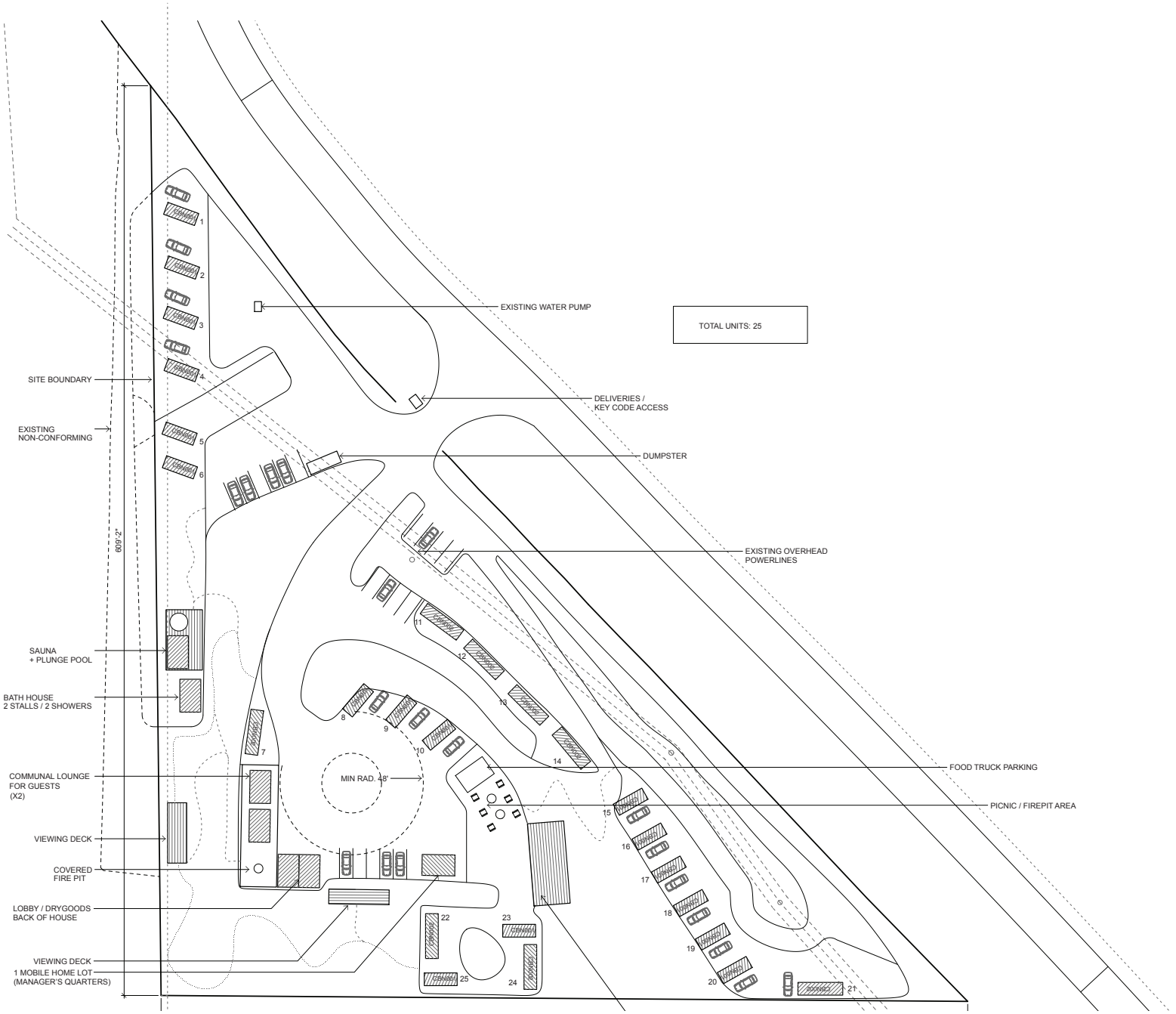
Attachments

Exhibit 1 – Project Site Plan
Exhibit 2 – Project Vicinity Map, Traffic Control, and Lane Geometry

Attachment A – Traffic Count Data Sheets
Attachment B – RV Turning Movements
Attachment C – Driveway Improvements Concept

[6] *TASAS Table B – SR-49 MPA 45.00-MPA 47.00 January 1, 2017-September 30, 2023*, Caltrans, Kevin Le, generated July 18, 2024.

NOT TO SCALE



Source: Topos Ventures, April 29, 2024

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Exhibit 1
Project Site Plan

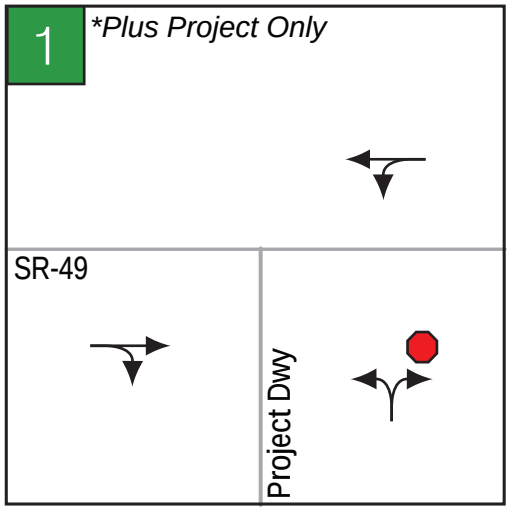

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Exhibit 2
Project Vicinity Map, Traffic Control, and Lane Geometry

Attachment A

Traffic Count Data Sheets

Prepared by National Data & Surveying Services

SPEED

SR 49 Bet SR 132 & Oak Ridge Rd

Day: Thursday
Date: 7/11/2024

City: Coulterville
Project #: CA24_090091_001

HOURLY BREAKDOWN

Time	NORTHBOUND														SOUTHBOUND														TOTALS													
	5 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 99	Total	5 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 99	Total	5 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 99	Total
0:00	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	3	5	0	0	0	0	0	0	1	0	0	1	1	0	3	6
1:00	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3	0	0	3
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	1	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	1	0	1	1	0	0	0	3	0	0	0	0	1	0	1	0	2	1	0	0	0	5
4:00	0	0	0	0	0	0	0	0	1	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4
5:00	0	0	0	0	0	0	1	0	6	7	5	0	0	19	0	0	0	0	0	0	0	0	2	0	2	0	0	4	0	0	0	0	0	0	0	1	0	8	7	7	0	0	23
6:00	0	0	0	0	0	0	1	1	5	5	7	5	0	24	0	0	0	0	0	1	0	0	2	3	4	0	1	11	0	0	0	0	0	1	1	1	7	8	11	5	1	35
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9:00	0	0	0	0	1	0	2	9	9	11	5	2	0	39	0	0	0	0	0	1	0	0	4	7	5	0	1	18	0	0	0	0	1	1	2	9	13	18	10	2	1	57
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Totals	0	0	0	1	4	10	21	45	131	109	62	26	11	420	0	0	0	3	2	5	11	28	96	131	85	32	17	410	0	0	0	4	6	15	32	73	227	240	147	58	28	830
% of Totals				0%	1%	2%	5%	11%	31%	26%	15%	6%	3%	100%				1%	0%	1%	3%	7%	23%	32%	21%	8%	4%	100%				0%	1%	2%	4%	9%	27%	29%	18%	7%	3%	100%

STATISTICS

	NORTHBOUND														SOUTHBOUND														TOTALS													
00:00 - 12:00	0	0	0	0	4	5	9	26	68	60	37	16	2	227	0	0	0	1	2	5	4	10	26	34	34	5	8	129	0	0	0	1	6	10	13	36	94	94	71	21	10	356
%	0%	0%	0%	0%	1%	1%	2%	6%	16%	14%	9%	4%	0%	54%	0%	0%	0%	0%	0%	1%	1%	2%	6%	8%	8%	1%	2%	31%	0%	0%	0%	0%	1%	2%	3%	9%	22%	22%	17%	5%	2%	85%
Peak Hour	0:00	0:00	0:00	0:00	9:15	7:00	8:30	9:00	9:45	11:30	6:45	6:30	8:00	9:45	0:00	0:00	0:00	9:15	10:30	10:45	9:30	11:30	10:15	10:00	10:30	9:45	0:00	10:45	0:00	0:00	0:00	9:15	11:00	10:45	8:30	11:00	10:15	11:30	10:45	6:30	0:00	11:00
Peak Volume	0	0	0	0	2	2	3	9	15	18	10	6	1	48	0	0	0	1	2	3	2	7	9	12	11	2	3	39	0	0	0	1	3	4	4	12	24	29	16	7	3	80
12:00 - 24:00	0	0	0	1	0	5	12	19	63	49	25	10	9	193	0	0	0	2	0	0	7	18	70	97	51	27	9	281	0	0	0	3	0	5	19	37	133	146	76	37	18	474
%	0%	0%	0%	0%	0%	1%	3%	5%	15%	12%	6%	2%	2%	46%	0%	0%	0%	0%	0%	0%	2%	4%	17%	23%	12%	6%	2%	67%	0%	0%	0%	1%	0%	1%	5%	9%	32%	35%	18%	9%	4%	113%
Peak Hour	12:00	12:00	12:00	19:30	12:00	15:30	15:00	12:00	14:45	12:00	12:00	16:30	18:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	19:45	15:00	13:00	15:45	16:15	15:45	16:15	16:15	12:00	12:00	12:00	19:30	12:00	15:30	15:00	12:00	13:15	12:00	16:00	15:45	17:00	12:00
Peak Volume	0	0	0	1	0	2	3	5	14	16	6	3	4	40	0	0	0	1	0	0	2	4	12	19	11	6	3	42	0	0	0	2	0	2	4	8	24	27	14	7	5	67
07:00 - 09:00	0	0	0	0	0	2	2	6	17	10	9	4	1	51	0	0	0	0	0	0	1	2	3	3	7	2	1	19	0	0	0	0	0	2	3	8	20	13	16	6	2	70
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Peak Hour	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:15	7:45	7:00	7:15	8:00	7:15	7:00	7:00	7:00	7:00	7:00	7:00	8:00	7:30	8:00	7:45	7:00	7:00	7:00	7:45	7:00	7:00	7:00	7:00	7:00	7:00	8:00	7:00	7:15	7:45	7:00	7:00	7:00	8:00
Peak Volume	0	0	0	0	0	2	1	3	11	8	5	3	1	27	0	0	0	0	0	0	1	2	3	3	5	1	1	11	0	0	0	0	0	2	2	4	11	11	10	3	1	36
16:00 - 18:00	0	0	0	0	0	1	1	2	7	6	8	4	2	31	0	0	0	0	0	0	1	4	15	25	16	7	5	73	0	0	0	0	0	1	2	6	22	31	24	11	7	104
%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%	2%	1%	0%	7%	0%	0%	0%	0%	0%	0%	0%	1%	4%	6%	4%	2%	1%	17%	0%	0%	0%	0%	0%	0%	0%	1%	5%	7%	6%	3%	2%	25%
Peak Hour	16:00	16:00	16:00	16:00	16:00	16:00	17:00	16:00	16:00	16:00	16:00	16:30	17:00	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:30	16:00	16:45	16:30	16:15	16:00	16:15	16:15	16:00	16:00	16:00	16:00	16:00	16:00	17:00	16:00	16:30	16:00	16:00	16:30	17:00	16:00
Peak Volume	0	0	0	0	0	1	1	2	5	4	4	3	2	18	0	0	0	0	0	0	1	2	12	16	11	4	3	42	0	0	0	0	0	1	2	4	16	19	14	7	5	58

Direction	Percentiles					
	15th	50th	Average	85th	95th	ADT
NORTHBOUND	48	55	55	63	68	420
SOUTHBOUND	51	57	58	64	69	410
TOTALS	50	56	56	64	69	830

Prepared by National Data & Surveying Services

VOLUME

SR 49 Bet SR 132 & Oak Ridge Rd

Day: Thursday
Date: 7/11/2024

City: Coulterville
Project #: CA24_090091_001

DAILY TOTALS	NB	SB	EB	WB	Total
	420	410	0	0	830

DAILY TOTALS

15-Minutes Interval

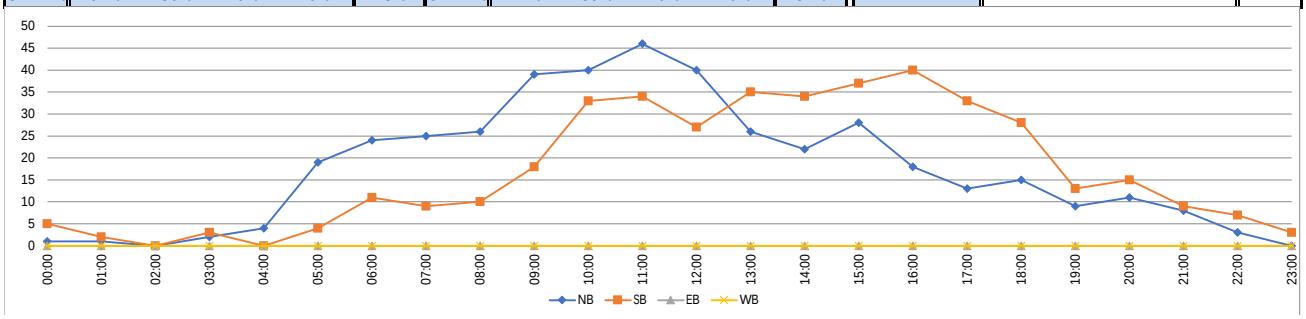
TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL
0:00	1	3			4	12:00	8	4			12
0:15	0	2			2	12:15	11	9			20
0:30	0	0			0	12:30	6	5			11
0:45	0	0			0	12:45	15	9			24
1:00	1	0			1	13:00	4	6			10
1:15	0	1			1	13:15	2	11			13
1:30	0	1			1	13:30	9	10			19
1:45	0	0			0	13:45	11	8			19
2:00	0	0			0	14:00	8	8			16
2:15	0	0			0	14:15	4	7			11
2:30	0	0			0	14:30	8	9			17
2:45	0	0			0	14:45	2	10			12
3:00	0	0			0	15:00	9	12			21
3:15	1	0			1	15:15	5	8			13
3:30	1	2			3	15:30	6	8			14
3:45	0	1			1	15:45	8	9			17
4:00	0	0			0	16:00	7	9			16
4:15	0	0			0	16:15	1	10			11
4:30	2	0			2	16:30	6	13			19
4:45	2	0			2	16:45	4	8			12
5:00	3	2			5	17:00	1	11			12
5:15	5	0			5	17:15	5	10			15
5:30	9	0			9	17:30	2	11			13
5:45	2	2			4	17:45	5	1			6
6:00	1	2			3	18:00	4	7			11
6:15	6	3			9	18:15	4	12			16
6:30	7	4			11	18:30	4	4			8
6:45	10	2			12	18:45	3	5			8
7:00	4	3			7	19:00	3	1			4
7:15	7	1			8	19:15	1	5			6
7:30	9	2			11	19:30	2	4			6
7:45	5	3			8	19:45	3	3			6
8:00	6	0			6	20:00	2	4			6
8:15	7	3			10	20:15	5	4			9
8:30	6	5			11	20:30	2	4			6
8:45	7	2			9	20:45	2	3			5
9:00	9	5			14	21:00	3	4			7
9:15	13	3			16	21:15	2	2			4
9:30	5	4			9	21:30	1	2			3
9:45	12	6			18	21:45	2	1			3
10:00	11	5			16	22:00	1	3			4
10:15	16	7			23	22:15	1	2			3
10:30	9	8			17	22:30	1	1			2
10:45	4	13			17	22:45	0	1			1
11:00	11	10			21	23:00	0	0			0
11:15	9	6			15	23:15	0	3			3
11:30	15	10			25	23:30	0	0			0
11:45	11	8			19	23:45	0	0			0
TOTALS	227	129	0	0	356	TOTALS	193	281	0	0	474
SPLIT %	64%	36%	0%	0%	43%	SPLIT %	41%	59%	0%	0%	57%

Hourly Intervals

TIME		NB	SB	EB	WB	TOTAL
00:00	01:00	1	5			6
01:00	02:00	1	2			3
02:00	03:00	0	0			0
03:00	04:00	2	3			5
04:00	05:00	4	0			4
05:00	06:00	19	4			23
06:00	07:00	24	11			35
07:00	08:00	25	9			34
08:00	09:00	26	10			36
09:00	10:00	39	18			57
10:00	11:00	40	33			73
11:00	12:00	46	34			80
12:00	13:00	40	27			67
13:00	14:00	26	35			61
14:00	15:00	22	34			56
15:00	16:00	28	37			65
16:00	17:00	18	40			58
17:00	18:00	13	33			46
18:00	19:00	15	28			43
19:00	20:00	9	13			22
20:00	21:00	11	15			26
21:00	22:00	8	9			17
22:00	23:00	3	7			10
23:00	00:00	0	3			3

STATISTICS

	NB	SB	EB	WB	TOTAL
Peak Period	00:00	to	12:00		
Volume	227	129			356
Peak Hour	9:45	10:45			11:00
Peak Volume	48	39			80
Peak Hour Factor	0.750	0.750			0.800
Peak Period	12:00	to	00:00		
Volume	193	281			474
Peak Hour	12:00	16:15			12:00
Peak Volume	40	42			67
Peak Hour Factor	0.667	0.808			0.698
Peak Period	07:00	to	09:00		
Volume	51	19			70
Peak Hour	7:15	7:45			8:00
Peak Volume	27	11			36
Peak Hour Factor	0.750	0.550			0.818
Peak Period	16:00	to	18:00		
Volume	31	73			104
Peak Hour	16:00	16:15			16:00
Peak Volume	18	42			58
Peak Hour Factor	0.643	0.808			0.763



Prepared by National Data & Surveying Services

SPEED

SR 49 Bet SR 132 & Oak Ridge Rd

Day: Saturday
Date: 7/20/2024

City: Coulterville
Project #: CA24_090091_001

HOURLY BREAKDOWN

Time	NORTHBOUND													
	5 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 99	Total
0:00	0	0	0	0	0	0	2	0	0	1	0	0	0	3
1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	0	2	1	0	0	0	3
5:00	0	0	0	0	0	1	1	2	2	2	1	1	0	10
6:00	0	0	0	1	0	0	1	3	2	3	2	1	0	13
7:00	0	0	0	0	0	2	0	3	5	1	0	1	0	12
8:00	0	0	0	0	0	0	0	2	4	7	3	0	0	16
9:00	0	0	0	0	0	0	3	3	8	7	3	2	3	29
10:00	0	0	0	0	1	1	4	10	11	8	5	1	0	41
11:00	0	0	0	0	1	1	2	6	18	10	7	2	0	47
12:00	0	0	0	0	0	0	2	5	7	9	4	1	0	28
13:00	0	0	0	1	0	0	2	5	10	9	3	2	4	36
14:00	0	0	0	1	0	0	1	5	11	5	2	3	0	28
15:00	0	0	0	0	0	0	0	4	6	7	2	2	0	21
16:00	0	0	0	0	0	2	1	0	3	3	7	1	2	19
17:00	0	0	0	0	0	0	0	2	5	8	1	2	1	19
18:00	0	0	0	0	0	1	0	2	5	3	2	2	0	15
19:00	0	0	0	1	0	0	3	2	2	7	5	2	0	22
20:00	0	0	0	0	0	0	3	1	0	4	3	2	0	13
21:00	0	0	0	0	0	1	2	2	2	4	1	0	0	12
22:00	0	0	0	0	0	0	2	1	0	1	0	0	1	5
23:00	0	0	0	0	0	2	1	0	1	1	0	0	0	5
Totals	0	0	0	4	2	11	31	58	104	101	51	25	11	398
% of Totals				1%	1%	3%	8%	15%	26%	25%	13%	6%	3%	100%

Time	SOUTHBOUND													
	5 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 99	Total
0:00	0	0	0	0	0	0	0	2	5	0	0	0	0	7
1:00	0	0	0	0	0	0	0	0	1	0	1	0	0	2
2:00	0	0	0	0	0	0	0	0	0	1	0	0	0	1
3:00	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:00	0	0	0	0	0	0	0	0	0	1	0	0	0	1
5:00	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:00	0	0	0	0	0	0	0	2	2	0	1	0	1	6
7:00	0	0	0	0	0	0	1	0	1	3	2	0	0	7
8:00	0	0	0	0	0	1	2	6	1	3	3	0	1	17
9:00	0	0	0	0	1	0	2	2	3	7	3	0	2	20
10:00	0	0	0	0	0	1	2	4	5	7	1	3	0	23
11:00	0	0	0	0	0	0	1	3	7	7	1	0	0	19
12:00	0	0	0	0	0	0	1	5	9	5	0	1	4	25
13:00	0	0	0	0	1	0	1	6	11	8	6	1	0	34
14:00	0	0	0	0	0	1	2	10	7	8	0	0	1	29
15:00	0	0	0	0	0	0	0	8	14	9	3	1	1	36
16:00	0	0	0	0	1	1	3	8	12	9	5	0	0	39
17:00	0	0	0	0	0	0	2	7	3	1	4	0	0	17
18:00	0	0	0	0	0	1	2	8	6	3	0	0	0	20
19:00	0	0	0	0	0	0	0	4	5	5	3	1	0	18
20:00	0	0	0	0	0	0	3	5	8	1	1	0	1	19
21:00	0	0	0	0	0	0	0	2	4	2	2	0	0	10
22:00	0	0	0	0	0	0	1	3	4	2	1	0	0	11
23:00	0	0	0	0	0	0	1	4	2	2	0	0	0	9
Totals	0	0	0	0	3	5	25	89	110	84	38	7	11	372
% of Totals					1%	1%	7%	24%	30%	23%	10%	2%	3%	100%

Time	TOTALS													
	5 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 99	Total
0:00	0	0	0	0	0	0	2	2	5	1	0	0	0	10
1:00	0	0	0	0	0	0	0	0	1	0	1	0	0	2
2:00	0	0	0	0	0	0	0	0	0	1	0	0	0	1
3:00	0	0	0	0	0	0	2	0	0	0	0	0	0	2
4:00	0	0	0	0	0	0	0	0	2	2	0	0	0	4
5:00	0	0	0	0	0	0	1	1	2	2	2	2	1	0	11
6:00	0	0	0	1	0	0	1	5	4	3	3	1	1	19
7:00	0	0	0	0	0	0	2	1	3	6	4	2	1	0	19
8:00	0	0	0	0	0	0	1	2	8	5	10	6	0	1	33
9:00	0	0	0	0	0	0	1	0	5	5	11	14	6	2	5	49
10:00	0	0	0	0	0	1	2	6	14	16	15	6	4	0	64
11:00	0	0	0	0	0	1	1	3	9	25	17	8	2	0	66
12:00	0	0	0	0	0	0	0	3	10	16	14	4	2	4	53
13:00	0	0	0	1	1	0	3	11	21	17	9	3	4	70
14:00	0	0	0	1	0	1	3	15	18	13	2	3	1	57
15:00	0	0	0	0	0	0	0	12	20	16	5	3	1	57
16:00	0	0	0	0	0	1	3	4	8	15	12	12	1	2	58
17:00	0	0	0	0	0	0	0	2	9	8	9	5	2	1	36
18:00	0	0	0	0	0	0	2	2	10	11	6	2	2	0	35
19:00	0	0	0	1	0	0	3	6	7	12	8	3	0	40
20:00	0	0	0	0	0	0	6	6	8	5	4	2	1	32
21:00	0	0	0	0	0	0	1	2	4	6	6	3	0	0	22
22:00	0	0	0	0	0	0	0	3	4	4	3	1	0	1	16
23:00	0	0	0	0	0	0	2	2	4	3	3	0	0	0	14
Totals	0	0	0	4	5	16	56	147	214	185	89	32	22	770
% of Totals				1%	1%	2%	7%	19%	28%	24%	12%	4%	3%	100%

STATISTICS

	NORTHBOUND													
	5 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 99	Total
00:00 - 12:00	0	0	0	1	2	5	14	29	52	40	21	8	3	175
%	0%	0%	0%	0%	1%	1%	4%	7%	13%	10%	5%	2%	1%	44%
Peak Hour	0:00	0:00	0:00	5:30	10:15	6:45	10:15	10:15	10:45	9:30	11:15	10:45	8:45	10:30
Peak Volume	0	0	0	1	2	2	5	11	20	10	8	3	3	52
12:00 - 24:00	0	0	0	3	0	6	17	29	52	61	30	17	8	223
%	0%	0%	0%	1%	0%	2%	4%	7%	13%	15%	8%	4%	2%	56%
Peak Hour	12:00	12:00	12:00	13:30	12:00	15:30	20:30	12:15	13:15	12:45	15:45	13:30	13:00	13:15
Peak Volume	0	0	0	2	0	2	4	6	13	13	7	3	4	38
07:00 - 09:00	0	0	0	0	0	2	0	5	9	8	3	1	0	28
%	0%	0%	0%	0%	0%	1%	0%	1%	2%	2%	1%	0%	0%	7%
Peak Hour	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	7:00	8:00	8:00	7:00	7:00	8:00
Peak Volume	0	0	0	0	0	2	0	3	5	7	3	1	0	16
16:00 - 18:00	0	0	0	0	0	2	1	2	8	11	8	3	3	38
%	0%	0%	0%	0%	0%	1%	0%	1%	2%	3%	2%	1%	1%	10%
Peak Hour	16:00	16:00	16:00	16:00	16:00	16:00	16:00	17:00	17:00	16:45	16:00	16:15	16:00	16:15
Peak Volume	0	0	0	0	0	2	1	2	5	10	7	2	2	22

	SOUTHBOUND													
	5 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 99	Total
00:00 - 12:00	0	0	0	0	1	2	9	19	25	29	13	3	4	105
%	0%	0%	0%	0%	0%	1%	2%	5%	6%	7%	3%	1%	1%	26%
Peak Hour	0:00	0:00	0:00	0:00	8:45	8:00	8:45	8:30	11:15	9:30	8:30	10:00	11:45	10:30
Peak Volume	0	0	0	0	1	1	4	7	8	9	5	3	4	25
12:00 - 24:00	0	0	0	0	2	3	16	70	85	55	25	4	7	267
%	0%	0%	0%	0%	1%	1%	4%	18%	21%	14%	6%	1%	2%	67%
Peak Hour	12:00	12:00	12:00	12:00	13:00	13:45	15:45	13:30	14:45	13:15	13:00	12:00	12:00	13:15
Peak Volume	0	0	0	0	1	1	3	10	16	10	6	1	4	39
07:00 - 09:00	0	0	0	0	0	1	3	6	2	6	5	0	1	24
%	0%	0%	0%	0%	0%	0%	1%	2%	1%	2%	1%	0%	0%	6%
Peak Hour	7:00	7:00	7:00	7:00	7:00	8:00	8:00	8:00	7:30	7:30	8:00	7:00	7:30	8:00
Peak Volume	0	0	0	0	0	1	2	6	2	5	3	0	1	17
16:00 - 18:00	0	0	0	0	0	1	1	5	15	15	10	9	0	0	56
%	0%	0%	0%	0%	0%	0%	0%	1%	4%	4%	3%	2%	0%	0%	14%
Peak Hour	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:15	16:00	16:00	16:45	16:00	16:00	16:00
Peak Volume	0	0	0	0	1	1	3	9	12	9	6	0	0	39

	TOTALS													
	5 15	15 20	20 25	25 30	30 35	35 40	40 45	45 50	50 55	55 60	60 65	65 70	70 99	Total
00:00 - 12:00	0	0	0	1	3	7	23	48	77	69	34	11	7	280
%	0%	0%	0%	0%	1%	2%	6%	12%	19%	17%	9%	3%	2%	70%
Peak Hour	0:00	0:00	0:00	5:30	9:30	6:45	10:30	10:15	10:30	9:30	8:30	10:45	9:00	10:30
Peak Volume	0	0	0	1	2	2	8	15	26	19	8	6	5	77
12:00 - 24:00	0	0	0	3	2	9	33	99	137	116	55	21	15	490
%	0%	0%	0%	1%	1%	2%	8%	25%	34%	29%	14%	5%	4%	123%
Peak Hour	12:00	12:00	12:00	13:30	13:00	15:30	20:00	13:45	13:15	12:45	16:00	19:15	12:00	13:15
Peak Volume	0	0	0	2	1	3	6	15	26	22	12	4	4	77
07:00 - 09:00	0	0	0	0	0	0	3	3	11	11	14	8	1	1	52
%	0%	0%	0%	0%	0%	0%	1%	1%	3%	3%	4%	2%	0%	0%	13%
Peak Hour	7:00	7:00	7:00	7:00	7:00	7:00	8:00	8:00	7:30	8:00	8:00	7:00	7:30	8:00
Peak Volume	0	0	0	0	0	0	2	2	8	7	10	6	1	1	33
16:00 - 18:00	0	0	0	0	0	0	1	3	6	17	23	21	17	3	3	94
%	0%	0%	0%	0%	0%	0%	0%	1%	2%	4%	6%	5%	4%	1%	1%	24%
Peak Hour	16:00	16:00	16:00	16:00	16:00	16:00	16:00	16:15	16:00	16:15	16:00	16:15	16:00	16:15
Peak Volume	0	0	0	0	0	0	1	3	4	10	15	13	12	2	2	59

Direction	Percentiles					
	15th	50th	Average	85th	95th	ADT
NORTHBOUND	46	54	55	63	68	398
SOUTHBOUND	46	53	54	60	65	372
TOTALS	46	54	54	62	67	770

Prepared by National Data & Surveying Services

VOLUME

SR 49 Bet SR 132 & Oak Ridge Rd

Day: Saturday
Date: 7/20/2024

City: Coulterville
Project #: CA24_090091_001

DAILY TOTALS	NB	SB	EB	WB	Total
	398	372	0	0	770

DAILY TOTALS

15-Minutes Interval

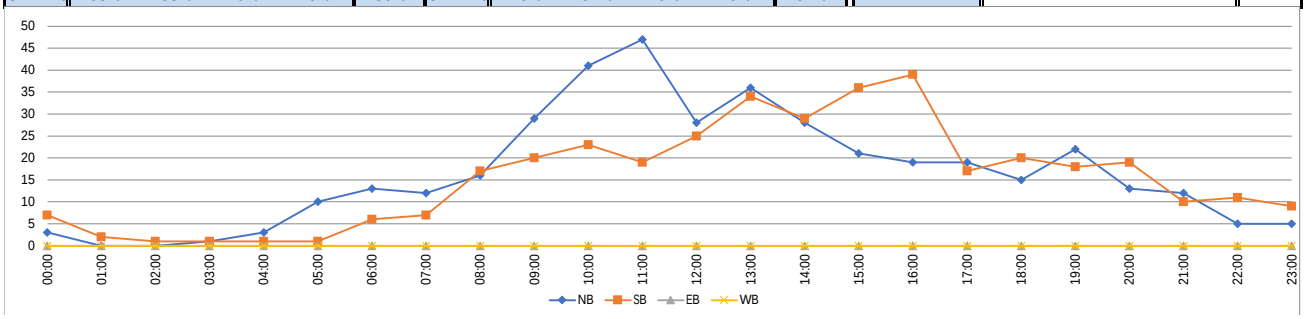
TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL
0:00	1	0			1	12:00	8	8			16
0:15	2	3			5	12:15	8	4			12
0:30	0	2			2	12:30	6	4			10
0:45	0	2			2	12:45	6	9			15
1:00	0	0			0	13:00	8	1			9
1:15	0	0			0	13:15	9	15			24
1:30	0	0			0	13:30	12	5			17
1:45	0	2			2	13:45	7	13			20
2:00	0	1			1	14:00	10	6			16
2:15	0	0			0	14:15	7	9			16
2:30	0	0			0	14:30	7	7			14
2:45	0	0			0	14:45	4	7			11
3:00	0	0			0	15:00	7	9			16
3:15	0	1			1	15:15	7	11			18
3:30	1	0			1	15:30	4	11			15
3:45	0	0			0	15:45	3	5			8
4:00	0	0			0	16:00	2	8			10
4:15	1	0			1	16:15	8	9			17
4:30	1	0			1	16:30	5	10			15
4:45	1	1			2	16:45	4	12			16
5:00	2	0			2	17:00	5	6			11
5:15	1	0			1	17:15	3	3			6
5:30	5	0			5	17:30	6	3			9
5:45	2	1			3	17:45	5	5			10
6:00	2	1			3	18:00	5	3			8
6:15	6	1			7	18:15	3	6			9
6:30	3	3			6	18:30	3	8			11
6:45	2	1			3	18:45	4	3			7
7:00	3	1			4	19:00	7	3			10
7:15	2	2			4	19:15	6	4			10
7:30	5	2			7	19:30	2	3			5
7:45	2	2			4	19:45	7	8			15
8:00	4	2			6	20:00	2	6			8
8:15	3	4			7	20:15	5	6			11
8:30	4	2			6	20:30	3	5			8
8:45	5	9			14	20:45	3	2			5
9:00	8	4			12	21:00	5	1			6
9:15	3	7			10	21:15	6	4			10
9:30	11	4			15	21:30	1	4			5
9:45	7	5			12	21:45	0	1			1
10:00	8	4			12	22:00	2	5			7
10:15	10	5			15	22:15	0	3			3
10:30	13	8			21	22:30	2	3			5
10:45	10	6			16	22:45	1	0			1
11:00	16	5			21	23:00	2	3			5
11:15	13	6			19	23:15	1	2			3
11:30	9	3			12	23:30	2	2			4
11:45	9	5			14	23:45	0	2			2
TOTALS	175	105	0	0	280	TOTALS	223	267	0	0	490
SPLIT %	63%	38%	0%	0%	36%	SPLIT %	46%	54%	0%	0%	64%

Hourly Intervals

TIME		NB	SB	EB	WB	TOTAL
00:00	01:00	3	7			10
01:00	02:00	0	2			2
02:00	03:00	0	1			1
03:00	04:00	1	1			2
04:00	05:00	3	1			4
05:00	06:00	10	1			11
06:00	07:00	13	6			19
07:00	08:00	12	7			19
08:00	09:00	16	17			33
09:00	10:00	29	20			49
10:00	11:00	41	23			64
11:00	12:00	47	19			66
12:00	13:00	28	25			53
13:00	14:00	36	34			70
14:00	15:00	28	29			57
15:00	16:00	21	36			57
16:00	17:00	19	39			58
17:00	18:00	19	17			36
18:00	19:00	15	20			35
19:00	20:00	22	18			40
20:00	21:00	13	19			32
21:00	22:00	12	10			22
22:00	23:00	5	11			16
23:00	00:00	5	9			14

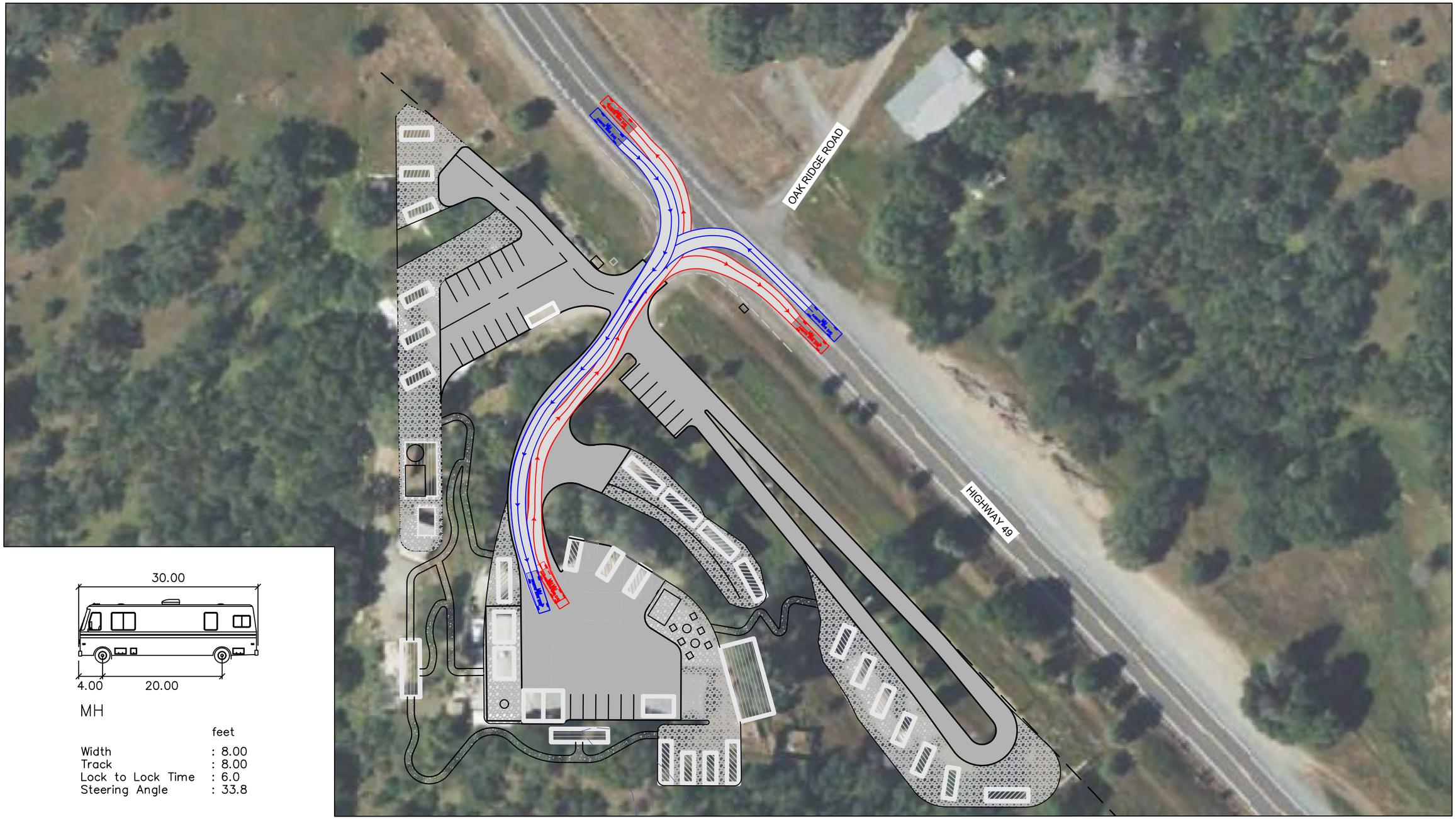
STATISTICS

	NB	SB	EB	WB	TOTAL
Peak Period	00:00	to	12:00		
Volume	175	105			280
Peak Hour	10:30	10:30			10:30
Peak Volume	52	25			77
Peak Hour Factor	0.813	0.781			0.917
Peak Period	12:00	to	00:00		
Volume	223	267			490
Peak Hour	13:15	13:15			13:15
Peak Volume	38	39			77
Peak Hour Factor	0.792	0.650			0.802
Peak Period	07:00	to	09:00		
Volume	28	24			52
Peak Hour	8:00	8:00			8:00
Peak Volume	16	17			33
Peak Hour Factor	0.800	0.472			0.589
Peak Period	16:00	to	18:00		
Volume	38	56			94
Peak Hour	16:15	16:00			16:15
Peak Volume	22	39			59
Peak Hour Factor	0.688	0.813			0.868



Attachment B

RV Turning Movements



MH

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 33.8

KEY

INBOUND

OUTBOUND

MARIPOSA YOSEMITE GOLD COUNTRY LODGE RV TURNING MOVEMENT

GRAPHIC SCALE IN FEET
0 15 30 60

NORTH

Kimley»Horn

555 CAPITOL MALL, SUITE 300, SACRAMENTO, CA 95814
PHONE: 916-858-5800 FAX: 916-608-0885
WWW.KIMLEY-HORN.COM

Attachment C

Driveway Improvements Concept

DESIGN CONCEPT
JULY 2024

DESIGN CONCEPT PLANS ON
STATE HIGHWAY
IN MARIPOSA COUNTY
AT THE INTERSECTION OF PROJECT DRIVEWAY AND SR-49

TO BE SUPPLEMENTED BY THE STATE STANDARD PLANS AND SPECIFICATIONS DATED 2023

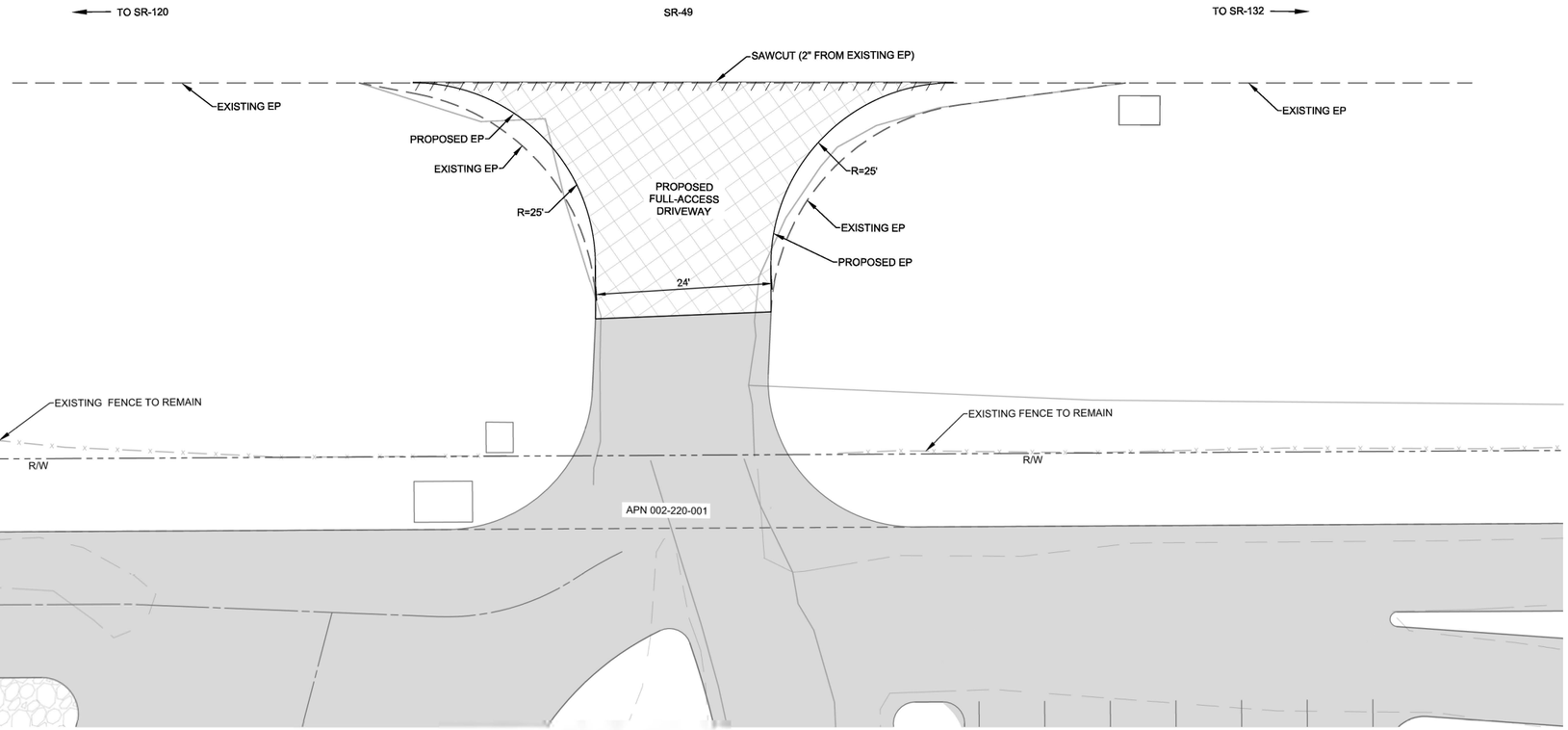
Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT
10	MPA	49	45.249

GENERAL NOTES

1. PROPOSED WORK SHALL CONFORM TO CALTRANS STANDARD PLANS AND STANDARD SPECIFICATIONS 2023.

LIST OF ABBREVIATIONS

EP - EDGE OF PAVEMENT
AB - AGGREGATE BASE
HMA - HOT MIX ASPHALT
R/W - RIGHT-OF-WAY
WV - WATER VALVE
CLF - CHAIN LINK FENCE
MH - MANHOLE

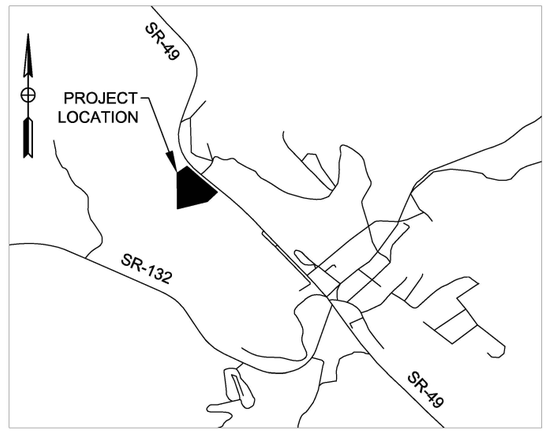


DRIVEWAY IMPROVEMENTS CONCEPT
1" = 10'

GRAPHIC SCALE IN FEET
0 5 10 20

NORTH

LOCATION MAP



VICINITY MAP
NTS

LEGEND

NEW PAVEMENT SECTION:

SAWCUT

811 Know what's below. Call before you dig.

DESIGN CONCEPT – NOT FOR CONSTRUCTION

Rev.	Description	Date

Kimley»Horn
555 CAPITOL MALL, STE 300 SACRAMENTO, CA 95814
PHONE: 916-858-5800
WWW.KIMLEY-HORN.COM

Scale	AS SHOWN
Designed By:	SMD
Drawn By:	SMD
Checked By:	
Consultant's Job No.	197815001

YOSEMITE GOLD COUNTRY LODGE
ATTACHMENT C

DRIVEWAY IMPROVEMENTS CONCEPT

Drawing No. L-01
Sheet 1 of 1

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES
0 1 2 3