

June 14, 2018

Appendix H

Mr. Stan Gamble
TRAFALGER, INC
237 S Hillview Drive
Milpitas, CA 95035

RE: TRAFFIC IMPACT ASSESSMENT OF FOR PANNER CREEK SUBDIVISION, SUTTER CREEK, CALIFORNIA AND BROAD MEADOWS SUBDIVISION, SUTTER CFREEK,

Dear Mr. Gamble:

Thanks for contacting KDAnderson & Associates regarding the Panner Creek subdivisions in Sutter Creek CA. As we discussed, the project is conditioned to construct portions of Golden Hills Drive that would contribute towards completion of a new route between Gopher Flat Road on the north and Sutter Creek Road on the south. However, to complete the entire length of route a new bridge is required. The traffic analysis we have completed is intended to determine whether development of the subdivision, along with other approved development in this area, creates traffic volumes that justify completing the route by building the bridge, and if so, how many lots can be occupied before triggering conditions are reached.

Technical Approach

The technical approach to answer these questions was identified by Mr. John Gedney at the Amador County Transportation Commission (ACTC). A baseline of current daily traffic volumes has been identified through new traffic counts east and west of the Golden Hills Drive alignment on Gopher Flat Road and on Sutter Creek Road. These volumes have been compared to the daily traffic volume Level of Service thresholds accepted by ACTC and the City of Sutter Creek to determine whether current conditions satisfy the minimum Level of Service requirements of both agencies. We then identified the amount of additional vehicular traffic that could be generated by approved but unoccupied subdivisions in the area and by the two proposed projects. These new trips will be added to the study area street system assuming the bridge is not constructed, and resulting Level of Service will be identified. Level of Service criteria were then reviewed to determine whether minimum standards would still be satisfied with both approved and proposed residences or what level of development could proceed before reaching the applicable threshold.

Project Description

The Panner Creek Subdivision is located in the area between Gopher Flat Road and Sutter Creek Road east of downtown Sutter Creek. The project was originally part of the Golden Hills Estates Subdivision, and other portions of that original approved subdivision have proceeded. Panner Creek, Unit 1 totals 21 lots and is located along an extension of Golden Hills Drive. Panner Creek, Unit 2 totals 20 lots and is further south between Unit 1 and Sutter Creek Road.

Figures 1 and 2 are the original tentative maps for each area.

Existing Setting / Conditions

Study Area Roads. This study addresses traffic conditions on the Sutter Creek streets and Amador County roads that will be used to access the site. The text that follows describes the facilities included in this analysis.

Gopher Flat Road. Gopher Flat Road and Shake Ridge Road link Sutter Creek with State Route 88. The Circulation Element Diagram of the 2017 Sutter Creek General Plan designates Gopher Flat Road as a local street. The route begins at the Main Street / Gopher Flat Road intersection in downtown Sutter Creek and continues for about a mile to Golden Hills Drive. In this area Gopher Flat Road is generally a two lane road with a paved width of 22-24 feet and minimal shoulders. The roadway has been widened in locations where development has occurred, and improvements in the area of the proposed project have resulted in a 28 foot wide ½ section on the south-east side of the road. The route becomes Shake Ridge Road in Amador County and continues for about 25 miles to SR 88.

Sutter Creek Road. Sutter Creek Road links Sutter Creek with the Amador County community of Volcano about ten miles to the east. The 2017 Circulation Element designates Sutter Creek Road as a local street. In the area of the project Sutter Creek Road is generally a two lane road with a paved width of 22-24 feet and minimal shoulders. The route becomes Sutter Creek – Volcano Road in Amador County.

Golden Hills Drive. Golden Hills Drive is not designated in the 2017 General Plan. The 1994 GP Circulation diagram indicated that an Eastern Bypass would eventually extend from Amador Road on the north to Ridge Road on the south along the general alignment of Golden Hills Drive. Today roughly 1,200 feet of Golden Hills Drive has been constructed in the area south of Gopher Flat Road.

Current Daily Traffic Volumes. New weekday 24 hour traffic volume counts were conducted for this assessment on study area roads on May 8, 2018, and the results are presented in Table 1.

TABLE 1 EXISTING TRAFFIC VOLUME AND LEVEL OF SERVICE ON STUDY AREA ROADS					
Roadway	Location	Level of Service			
		Minimum LOS	Maximum Volume at Minimum LOS*	Daily Volume	LOS
Gopher Flat Rd	West of Golden Hills Dr	D	11,840	1,640	A
	East of Golden Hills Dr	D	11,840	861	A
Sutter Creek Rd	West of Hillside Dr	D	11,840	1,524	A
	East of Lotus Lane	D	11,840	1,411	A
Golden Hills Dr	South of Gopher Flat Rd	D	11,840	196	A

* Source: 2015 Amador County Regional Transportation Plan

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Level of Service Analysis- Methodology

Level of Service Analysis has been employed to provide a basis for describing existing traffic conditions and for evaluating the effects of addition traffic. Level of Service measures the *quality* of traffic flow and is represented by letter designations from "A" to "F", with a grade of "A" referring to the best conditions, and "F" representing the worst conditions. Table 2 presents typical Level of Service characteristics.

TABLE 2 LEVEL OF SERVICE DEFINITIONS			
Level of Service	Signalized Intersection	Un-signalized Intersection	Roadway (Daily)
"A"	Uncongested operations, all queues clear in a single-signal cycle. Delay ≤ 10.0 sec	Little or no delay. Delay ≤ 10.0 sec/veh	Completely free flow.
"B"	Uncongested operations, all queues clear in a single cycle. Delay > 10.0 sec and ≤ 20.0 sec	Short traffic delays. Delay > 10 sec/veh and ≤ 15 sec/veh	Free flow, presence of other vehicles noticeable.
"C"	Light congestion, occasional backups on critical approaches. Delay > 20.0 sec and ≤ 35.0 sec	Average traffic delays. Delay > 15 sec/veh and ≤ 25 sec/veh	Ability to maneuver and select operating speed affected.
"D"	Significant congestions of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 35.0 sec and ≤ 55.0 sec	Long traffic delays. Delay > 25 sec/veh and ≤ 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.
"E"	Severe congestion with some long standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55.0 sec and ≤ 80.0 sec	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh	At or near capacity, flow quite unstable.
"F"	Total breakdown, stop-and-go operation. Delay > 80.0 sec	Intersection blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.
Sources: 2010 <u>Highway Capacity Manual</u> , Transportation Research Board (TRB) Special Report 209.			

Standards of Significance. Local agencies and Caltrans adopt minimum Level of Service standards for their facilities.

The 2105 Amador County Regional Transportation Plan notes that the acceptable Level of Service is LOS "C" on all roads in Amador County outside of incorporated cities or other developed communities. The policy is to maintain LOS D or better for State highways and local streets and roads within incorporated cities and other developed communities.

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The methodologies employed to determine Level of Service for this analysis makes use of background materials contained in the RTP. The 2015 RTP contains adopted Level of Service criteria for generalized roadway segments based on daily traffic volume.

Roadway Segment Level of Service

Roadway segment Level of Service definitions are based on information in the *2015 Amador County Regional Transportation Plan Update*. Table 3 presents the applicable roadway segment LOS definitions for the roadway segments included in this analysis.

TABLE 3 DAILY TRAFFIC VOLUME LEVEL OF SERVICE THRESHOLDS					
Facility	Daily Service Volumes (Vehicles per day)				
	LOS A	LOS B	LOS C	LOS D	LOS E
Gopher Flat – Shake Ridge Road	2,080	4,240	6,880	11,840	17,840
Sutter Creek – Volcano Road	2,080	4,240	6,880	11,840	17,840

Source: *2015 Amador County Regional Transportation Plan Update, Appendix F, Table 1. Based on 2010 HCM*

As indicated in Table 3, the current daily traffic volume on all roads in the area of the project is indicative of LOS A conditions.

Traffic Volume Forecasts

The volume of additional traffic occurring on study area roads as a result of new development has been estimated by identify the number of new residential units that may be developed, applying approved trip generation rates to these new land uses and distributing these trips to the study area roadway system.

Land Use. Approved tentative maps were reviewed and vacant lots were inventoried in order to estimate the number of additional homes that may be developed in the area of the prosed project. As noted in Table 4, in addition to the proposed projects there are 10 lots in Broadmeadows Estates and twelve vacant lots that remain to be developed at various locations in the study area.

Daily Trip Generation. The amount of vehicle traffic associated with new development has been estimated using trip generation rates from sources that are commonly accepted by Caltrans and Amador County Transportation Commission (ACTC). Daily trip generation rates for single family detached residences were obtained from the 10th Edition of the *ITE Trip Generation Manual*. Applying the average rate per residence to the vacant lot inventory and to Broadmeadows Estates indicates that another 207 daily trips can be expected (i.e., ½ inbound and ½ outbound). Panner Creek would generate 481 new daily trips.

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TABLE 4 DEVELOPMENT AND TRIP GENERATION				
Name	Access via	Lots	Trips per Lot	Daily Trips
Vacant lots	Herrington Ct	5	9.44	47
Vacant lots	Ridgecrest Ct	5	9.44	47
Vacant lots	Gopher Flat Road	1	9.44	9
Vacant lots	Sutter Crest Way	1	9.44	9
Broadmeadows	Golden Hills Drive	10	9.44	94
	<i>Subtotal</i>	<i>12</i>	<i>9.44</i>	<i>207</i>
Panner Creek	Golden Hills Drive	41	9.44	387
	<i>Subtotal</i>			<i>387</i>
Total				594
Source: ITE Trip Generation Manual, 10 th Edition				

Trip Distribution. This assessment assumes that the bridge and connection to Sutter Creek Road are not made and that all new trips eventually use Gopher Flat Road. The directional distribution of trips along Gopher Flat Road was determined from new a.m. and p.m. peak hour intersection turning movement counts conducted at the Gopher Flat Road / Golden Hills Drive intersection on May 9, 2018. As indicated, those counts indicated that nearly every vehicle entering or exiting Gopher Flat Road at the intersection was oriented to the west on Gopher Flat Road.

TABLE 5 TRIP DISTRIBUTION AT GOPHER FLAT ROAD / GOLDEN HILLS DRIVE INTERSECTION				
Time Period	Total Vehicles			
	West on Gopher Flat Rd		East on Gopher Flat Rd	
	inbound	outbound	inbound	outbound
7:00 to 9:00 a.m.	10	23	0	0
4:00 to 6:00 p.m.	28	21	0	1
Total	38	44	0	1
	82		1	
Percent of Total	99%		1%	

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Impact Assessment

Traffic Volumes. Table 6 presents the daily traffic volumes that would be added to study area roads if identified development occurs without access to Sutter Creek Road, generates trips at the assumed rate and follows the distribution pattern noted previously.

Level of Service. As noted in Table 6, the addition of trips from Broadmeadows and currently vacant lots has a very minor effect on conditions along Gopher Flat Road. As shown the resulting traffic volumes would still be indicative of LOS A conditions.

The build out of Panner Creek would further increase daily traffic volumes on Gopher Flat Road, and the Level of Service will drop for LOS A to LOS B. However, as LOS B remains well within the RTP's LOS D threshold for acceptable conditions, the resulting volumes do not represent a significant impact.

Conclusion

Development of 100% of Panner Creek without a connection to Sutter Creek Road does not result in a significant traffic impact under the criteria adopted by the RTP.

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**TABLE 6
 PROJECTED TRAFFIC VOLUMES AND LEVEL OF SERVICE ON STUDY AREA ROADS**

Roadway	Location	Level of Service								
		Minimum LOS	Existing Conditions		Existing Plus Broadmeadows Vacant Lots			Existing Plus Vacant Lots and Panner Creek		
			Daily Volume	LOS	Daily Volume		LOS	Daily Volume		LOS
					Projects	Total		Panner Creek Only	Total	
Gopher Flat Rd	West of Golden Hills Dr	D	1,640	A	204	1,844	A	383	2,227	B
	East of Golden Hills Dr	D	861	A	3	864	A	4	868	A
Sutter Creek Rd	West of Hillside Dr	D	1,524	A	0	1,524	A	0	1,524	A
	East of Lotus Lane	D	1,411	A	0	1,411	A	0	1,411	A
Golden Hills Dr	South of Gopher Flat Rd	D	196	A	47	243	A	481	724	A

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Mr. Stan Gamble
TRAFALGER, INC.
June 14, 2018
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Thank you again for contacting our firm. Please call me if you have any questions or need additional information.

Sincerely yours,

KD Anderson & Associates, Inc.

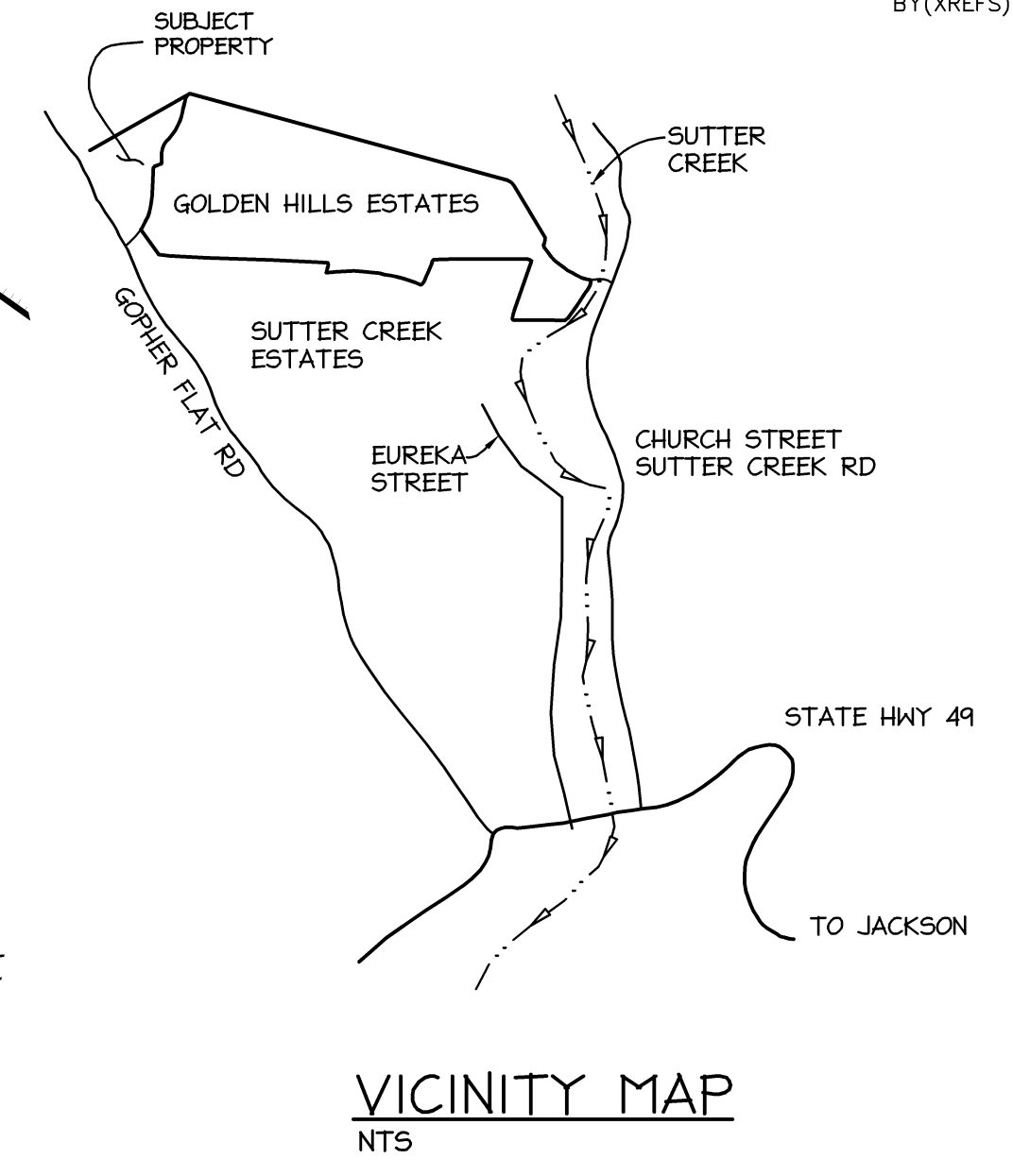
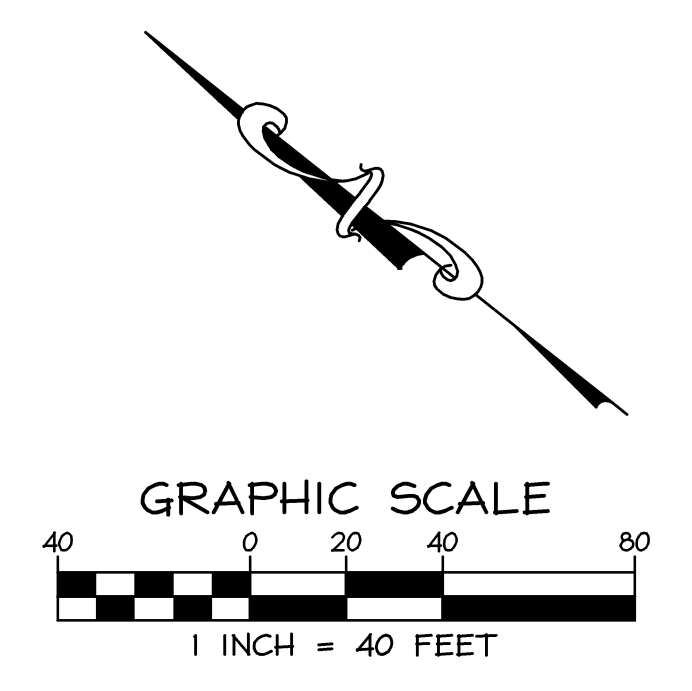
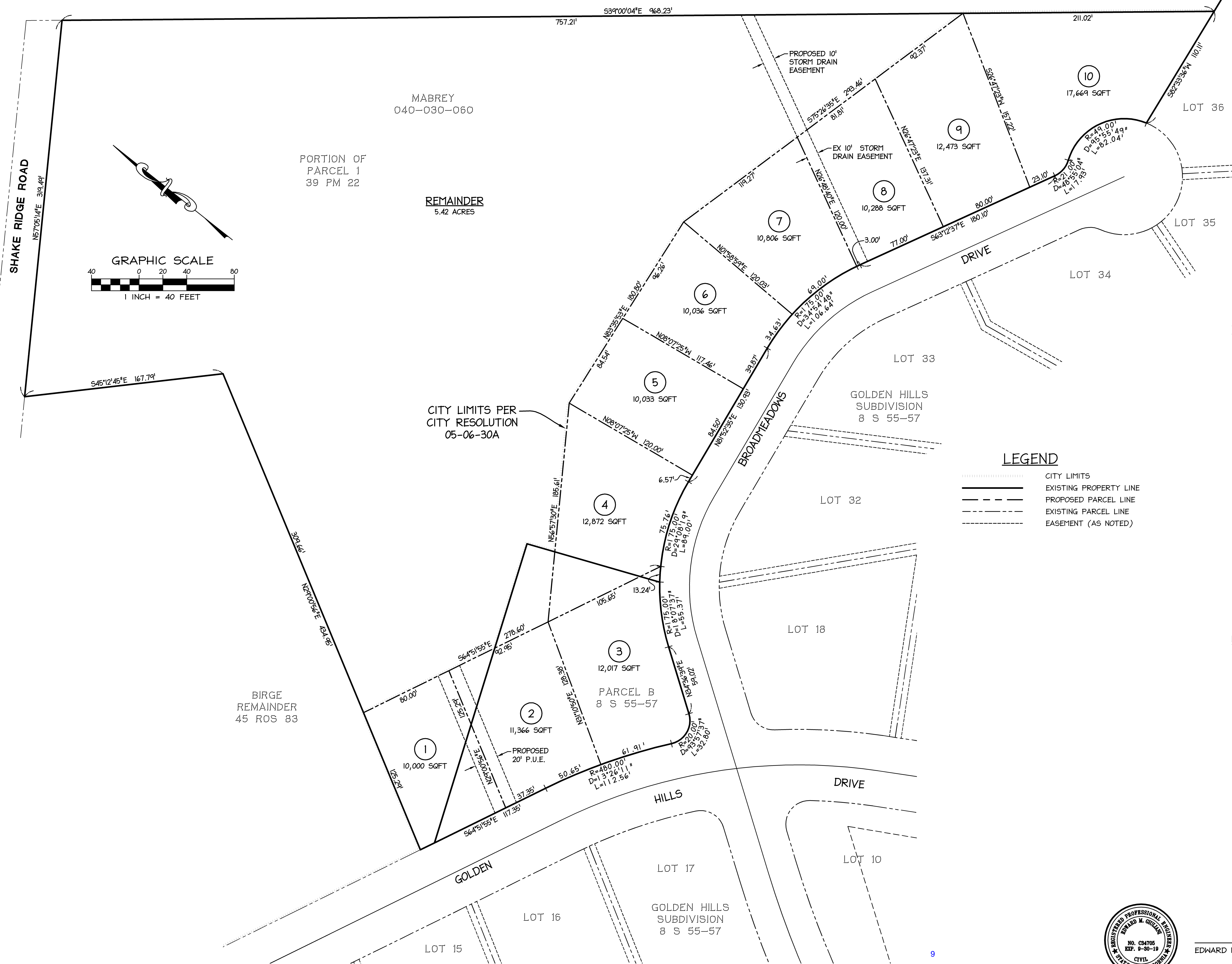
A handwritten signature in black ink, appearing to read 'K D Anderson', with a long horizontal flourish extending to the right.

Kenneth D. Anderson, P.E.
President

Attachments: Figures, Traffic counts

cc: Bruce Barraco

SCALE	DATE	REVISIONS
1"=40'		
DRAWN BY		
DESIGNED BY		
CHECKED BY		



PROJECT INFORMATION

OWNERS:
 DAVID A MABREY
 5693 TUBAC LANE
 SAN JOSE, CA 95118

FRANK TRUJILLO
 2546 PAPPAS PLACE
 HAYWARD, CA 94542

ENGINEER:
 GIULIANI AND KULL, INC.
 500 WALL STREET
 AUBURN, CA 95603
 PHONE: (530) 885-5107

SITE ADDRESS: GOLDEN HILLS DRIVE, SUTTER CREEK CA

PARCEL SIZE (AVERAGE): 11,290 SQFT

CURRENT ZONING: RESIDENTIAL LOW DENSITY

CURRENT USAGE: VACANT

PROPOSED NUMBER OF LOTS: 10 + REMAINDER

PROPOSED ZONING:

PROPOSED USAGE: SINGLE FAMILY RESIDENTIAL

MINIMUM LOT SIZE (AS PROPOSED): 9,511 SQFT

UTILITIES/SERVICES:

WATER: WATER WILL BE SUPPLIED BY THE AMADOR COUNTY WATER AGENCY. A DISTRIBUTION AND MAIN SYSTEM EXISTS IN CITY STREETS.

SEWER: SEWER SERVICE WILL BE SUPPLIED BY THE CITY OF SUTTER CREEK BY A COLLECTION SYSTEM WHICH EXISTS IN CITY STREETS.

STORM DRAINAGE: STORM DRAINAGE SYSTEM WILL BE SUPPLIED BY THE CITY OF SUTTER CREEK BY A COLLECTION SYSTEM WHICH EXISTS IN CITY STREETS.

ELECTRICAL/GAS: ELECTRICITY AND GAS WILL BE SUPPLIED BY PG&E AND PLACED UNDERGROUND

TELEPHONE: TELEPHONE WILL BE SERVICE BY PACIFIC TELEPHONE AND PLACED UNDERGROUND

FIRE DISTRICT: FIRE PROTECTION WILL BE SERVED BY THE SUTTER CREEK VOLUNTEER FIRE DEPARTMENT

SCHOOL DISTRICT: SCHOOLING WILL BE PROVIDED BY THE AMADOR COUNTY UNIFIED SCHOOL DISTRICT

LEGEND

-----	CITY LIMITS
-----	EXISTING PROPERTY LINE
-----	PROPOSED PARCEL LINE
-----	EXISTING PARCEL LINE
-----	EASEMENT (AS NOTED)

GK Giuliani & Kull, Inc.
 Engineers • Planners • Surveyors
 500 Wall Street, Auburn, CA 95603
 (530) 885-5107 Fax (530) 885-5157
 Auburn • San Jose • Oakdale

**BROAD MEADOWS
 ESTATES
 BROADMEADOWS DRIVE
 SUTTER CREEK, CALIFORNIA**

**VESTING
 TENTATIVE MAP**



EDWARD M. GIULIANI, PE 34705, EXPIRES 9-30-19 DATE

SHEET	1
OF 1 SHEETS	
DATE	SEP 5, 2017
JOB NO.	02197

KD ANDERSON & ASSOCIATES, INC.

7643-01

Sutter Creek
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 660-1555

File Name : Gopher Flat Rd & Golden Hills Dr
Date : 5/9/2018

Unshifted Count = All Vehicles & Uturns

START TIME	Golden Hills Drive Southbound					Gopher Flat Road Westbound					Golden Hills Road Northbound					Gopher Flat Road Eastbound					Total	Uturns Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
7:00	0	0	0	0	0	0	11	0	0	11	2	0	0	0	2	0	1	2	0	3	16	0
7:15	0	0	0	0	0	0	10	0	0	10	2	0	0	0	2	0	2	0	0	2	14	0
7:30	0	0	0	0	0	0	30	0	0	30	4	0	0	0	4	0	8	0	0	8	42	0
7:45	0	0	0	0	0	0	31	0	0	31	7	0	0	0	7	0	13	2	0	15	53	0
Total	0	0	0	0	0	0	82	0	0	82	15	0	0	0	15	0	24	4	0	28	125	0
8:00	0	0	0	0	0	0	16	0	0	16	2	0	0	0	2	0	6	1	0	7	25	0
8:15	0	0	0	0	0	0	17	0	0	17	3	0	0	0	3	0	4	2	0	6	26	0
8:30	0	0	0	0	0	0	9	0	0	9	1	0	0	0	1	0	5	2	0	7	17	0
8:45	0	0	0	0	0	0	4	0	0	4	2	0	0	0	2	0	7	1	0	8	14	0
Total	0	0	0	0	0	0	46	0	0	46	8	0	0	0	8	0	22	6	0	28	82	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	9	0	0	9	1	0	0	0	1	0	11	5	0	16	26	0
16:15	0	0	0	0	0	0	8	0	0	8	3	0	1	0	4	0	11	2	0	13	25	0
16:30	0	0	0	0	0	0	6	0	0	6	3	0	0	0	3	0	10	7	0	17	26	0
16:45	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	0	12	3	0	15	24	0
Total	0	0	0	0	0	0	31	0	0	31	8	0	1	0	9	0	44	17	0	61	101	0
17:00	0	0	0	0	0	0	9	0	0	9	2	0	0	0	2	0	21	4	0	25	36	0
17:15	0	0	0	0	0	0	4	0	0	4	2	0	0	0	2	0	14	1	0	15	21	0
17:30	0	0	0	0	0	0	12	0	0	12	2	0	0	0	2	0	15	4	0	19	33	0
17:45	0	0	0	0	0	0	3	0	0	3	7	0	0	0	7	0	24	2	0	26	36	0
Total	0	0	0	0	0	0	28	0	0	28	13	0	0	0	13	0	74	11	0	85	126	0
Grand Total	0	0	0	0	0	0	187	0	0	187	44	0	1	0	45	0	164	38	0	202	434	0
Apprch %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	97.8%	0.0%	2.2%	0.0%	0.0%	0.0%	81.2%	18.8%	0.0%	0.0%		
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	43.1%	0.0%	0.0%	43.1%	10.1%	0.0%	0.2%	0.0%	10.4%	0.0%	37.8%	8.8%	0.0%	46.5%	100.0%	

AM PEAK HOUR	Golden Hills Drive Southbound					Gopher Flat Road Westbound					Golden Hills Road Northbound					Gopher Flat Road Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	0	0	0	0	0	30	0	0	30	4	0	0	0	4	0	8	0	0	8	42
7:45	0	0	0	0	0	0	31	0	0	31	7	0	0	0	7	0	13	2	0	15	53
8:00	0	0	0	0	0	0	16	0	0	16	2	0	0	0	2	0	6	1	0	7	25
8:15	0	0	0	0	0	0	17	0	0	17	3	0	0	0	3	0	4	2	0	6	26
Total Volume	0	0	0	0	0	0	94	0	0	94	16	0	0	0	16	0	31	5	0	36	146
% App Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	86.1%	13.9%	0.0%	0.0%	
PHF	.000	.000	.000	.000	.000	.000	.758	.000	.000	.758	.571	.000	.000	.000	.571	.000	.596	.625	.000	.600	.689

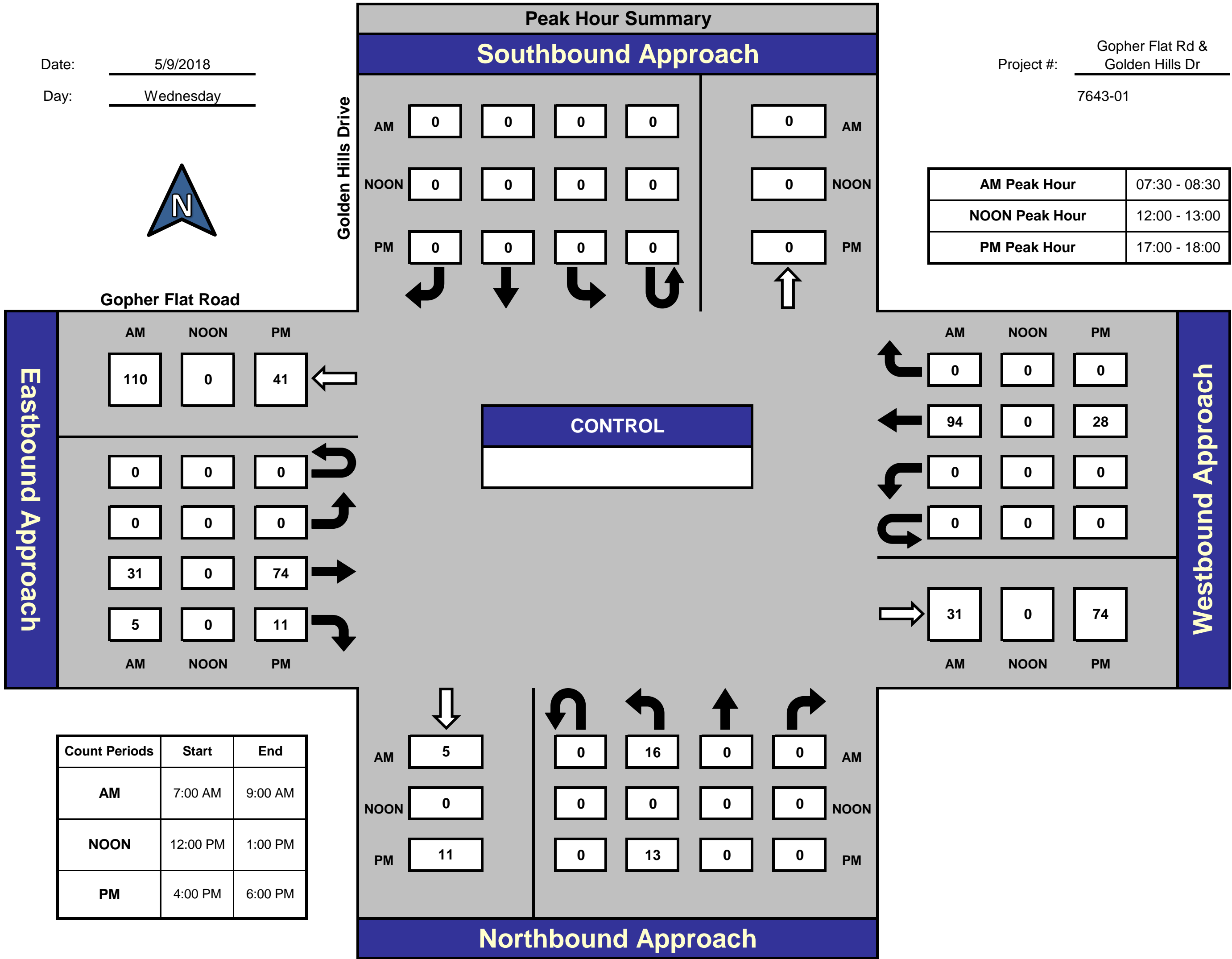
NOON PEAK	Golden Hills Drive Southbound					Gopher Flat Road Westbound					Golden Hills Road Northbound					Gopher Flat Road Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 12:00 to 13:00																					
Peak Hour For Entire Intersection Begins at 12:00																					
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App Total	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%	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

PM PEAK HOUR	Golden Hills Drive Southbound					Gopher Flat Road Westbound					Golden Hills Road Northbound					Gopher Flat Road Eastbound					Total
	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	0	0	0	9	0	0	9	2	0	0	0	2	0	21	4	0	25	36
17:15	0	0	0	0	0	0	4	0	0	4	2	0	0	0	2	0	14	1	0	15	21
17:30	0	0	0	0	0	0	12	0	0	12	2	0	0	0	2	0	15	4	0	19	33
17:45	0	0	0	0	0	0	3	0	0	3	7	0	0	0	7	0	24	2	0	26	36
Total Volume	0	0	0	0	0	0	28	0	0	28	13	0	0	0	13	0	74	11	0	85	126
% App Total	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	87.1%	12.9%	0.0%	0.0%	
PHF	.000	.000	.000	.000	.000	.000	.583	.000	.000	.583	.464	.000	.000	.000	.464	.000	.771	.688	.000	.817	.875

Gopher Flat Rd & Golden Hills Dr

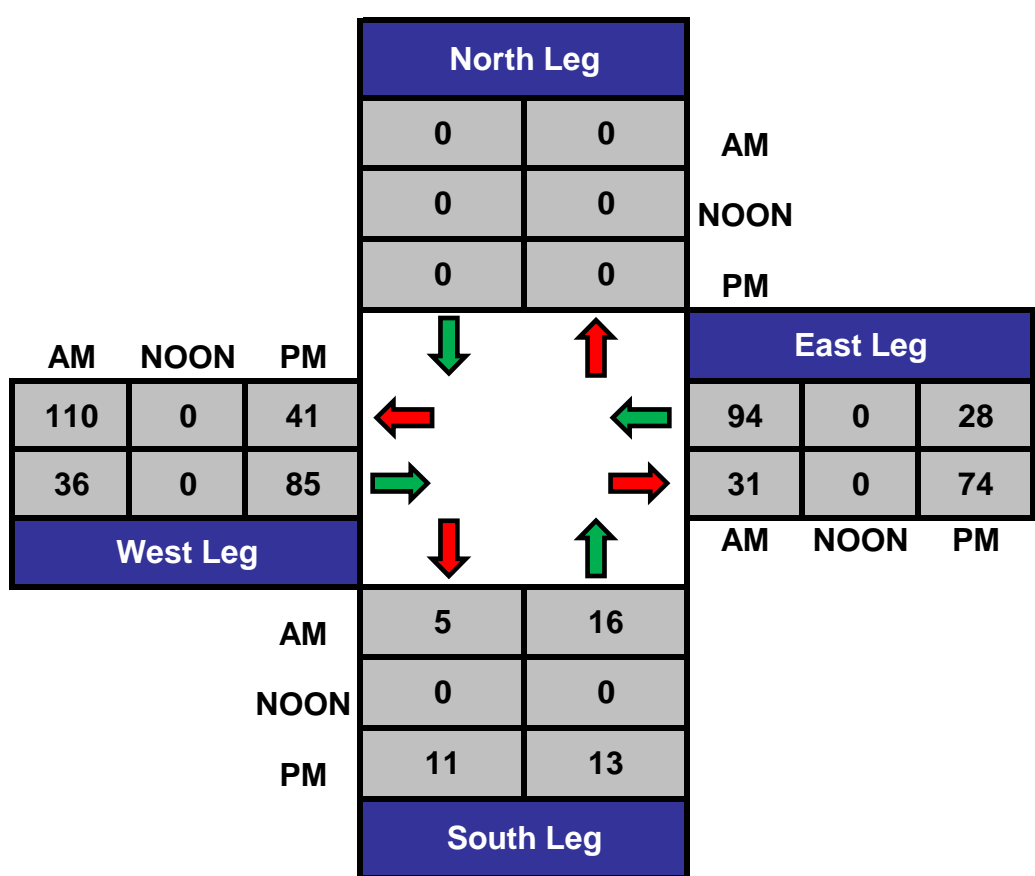
Date: 5/9/2018
 Day: Wednesday

Project #: Gopher Flat Rd & Golden Hills Dr
 7643-01

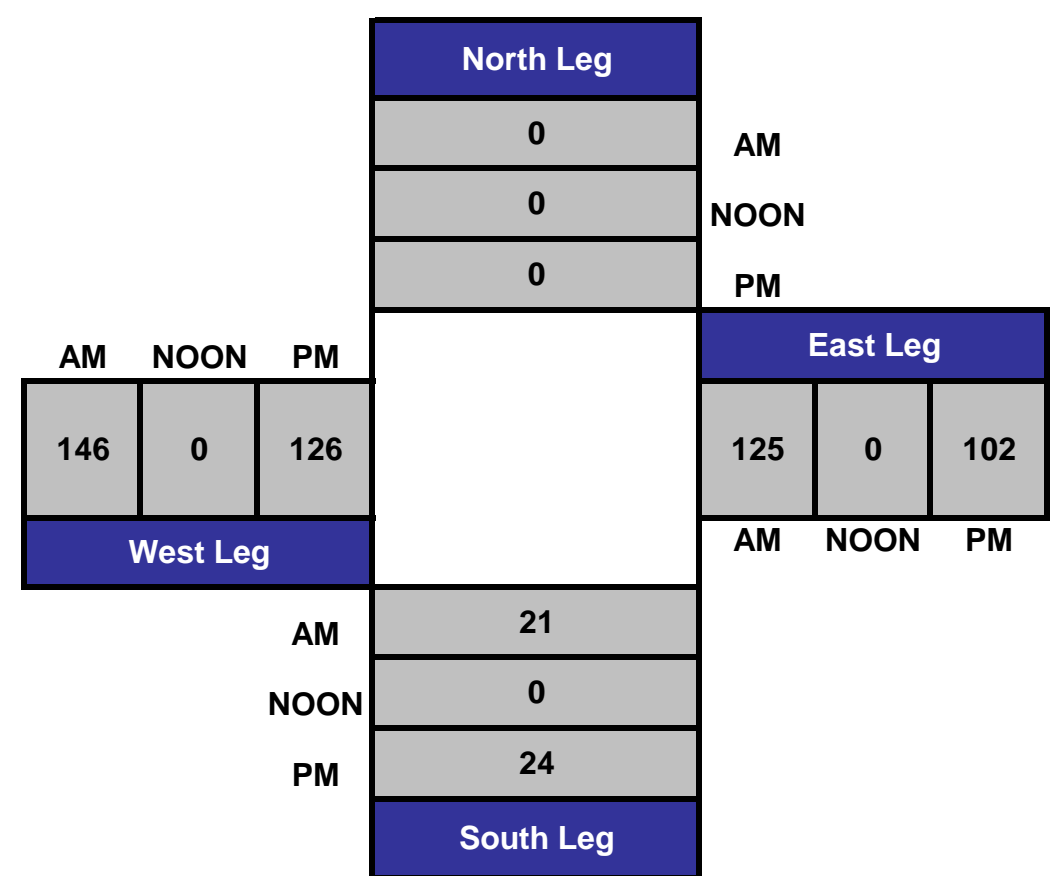


Count Periods	Start	End
AM	7:00 AM	9:00 AM
NOON	12:00 PM	1:00 PM
PM	4:00 PM	6:00 PM

Total Ins & Outs



Total Volume Per Leg



VOLUME

Gopher Flat Rd W/O Manor Ct

Day: Tuesday
Date: 5/8/2018

City: Sutter Creek
Project #: CA18_7173_001 7643-01

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	819	821	1,640		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			1	1	2	12:00			7	9	16
00:15			0	0	0	12:15			11	15	26
00:30			2	0	2	12:30			10	12	22
00:45			0	3	0	12:45			15	43	27
				0	1				12	48	91
01:00			1	1	2	13:00			16	8	24
01:15			0	0	0	13:15			9	13	22
01:30			0	0	0	13:30			14	9	23
01:45			0	1	0	13:45			11	50	29
				0	1				18	48	98
02:00			0	0	0	14:00			20	12	32
02:15			0	1	1	14:15			16	11	27
02:30			0	1	1	14:30			12	11	23
02:45			0	1	3	14:45			10	58	17
				3	3				7	41	99
03:00			1	0	1	15:00			14	18	32
03:15			1	3	4	15:15			20	15	35
03:30			0	1	1	15:30			19	11	30
03:45			0	2	0	15:45			21	74	30
				0	4				9	53	127
04:00			0	0	0	16:00			20	8	28
04:15			0	1	1	16:15			20	10	30
04:30			0	7	7	16:30			15	14	29
04:45			0	4	4	16:45			20	75	29
				12	12				9	41	116
05:00			0	6	6	17:00			22	14	36
05:15			0	6	6	17:15			33	9	42
05:30			0	4	4	17:30			25	12	37
05:45			3	3	7	17:45			24	104	40
				23	10				16	51	155
06:00			1	17	18	18:00			16	8	24
06:15			2	12	14	18:15			15	2	17
06:30			3	12	15	18:30			11	6	17
06:45			2	8	11	18:45			17	59	23
				52	13				6	22	81
07:00			3	16	19	19:00			12	3	15
07:15			3	31	34	19:15			19	4	23
07:30			15	29	44	19:30			5	1	6
07:45			12	33	60	19:45			11	47	17
				136	72				6	14	61
08:00			11	22	33	20:00			7	8	15
08:15			5	17	22	20:15			20	5	25
08:30			12	17	29	20:30			19	5	24
08:45			8	36	19	20:45			7	53	9
				75	27				2	20	73
09:00			7	20	27	21:00			4	4	8
09:15			11	12	23	21:15			5	3	8
09:30			6	12	18	21:30			5	3	8
09:45			14	38	20	21:45			4	18	4
				64	34				0	10	28
10:00			8	10	18	22:00			3	0	3
10:15			14	11	25	22:15			3	1	4
10:30			16	8	24	22:30			4	0	4
10:45			8	46	17	22:45			3	13	4
				46	25				1	2	15
11:00			13	15	28	23:00			1	1	2
11:15			7	11	18	23:15			1	0	1
11:30			19	14	33	23:30			0	0	0
11:45			13	52	13	23:45			1	3	1
				53	26				0	1	4
TOTALS			222	470	692	TOTALS			597	351	948
SPLIT %			32.1%	67.9%	42.2%	SPLIT %			63.0%	37.0%	57.8%

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	819	821	1,640

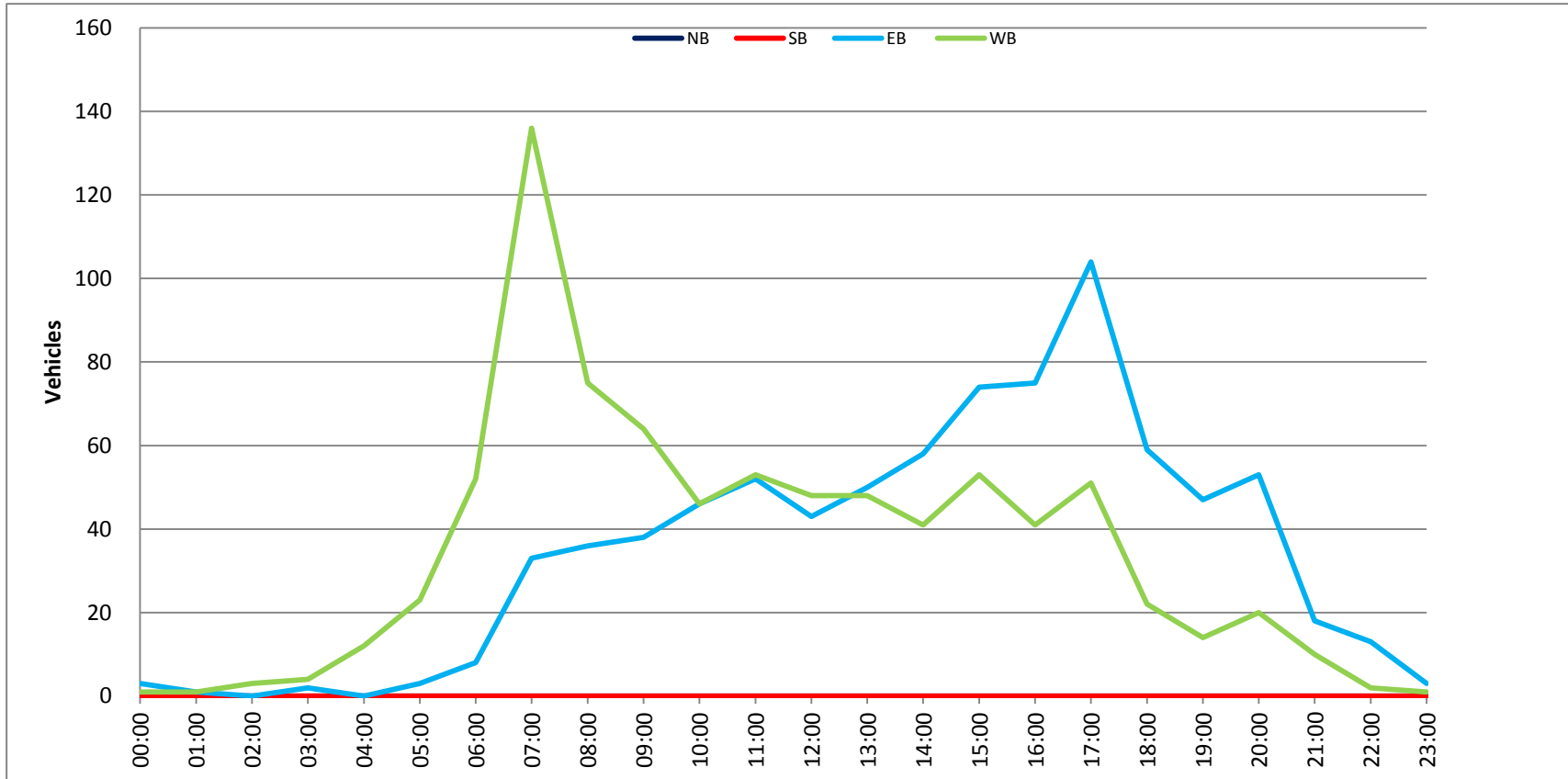
AM Peak Hour	09:45	07:15	07:15	PM Peak Hour	17:00	15:00	17:00				
AM Pk Volume	52	142	183	PM Pk Volume	104	53	155				
Pk Hr Factor	0.813	0.592	0.635	Pk Hr Factor	0.788	0.736	0.923				
7 - 9 Volume	0	0	69	211	280	4 - 6 Volume	0	0	179	92	271
7 - 9 Peak Hour	07:30	07:15	07:15	4 - 6 Peak Hour	17:00	17:00	17:00				
7 - 9 Pk Volume	0	0	43	142	183	4 - 6 Pk Volume	0	0	104	51	155
Pk Hr Factor	0.000	0.000	0.717	0.592	0.635	Pk Hr Factor	0.000	0.000	0.788	0.797	0.923

Project #: CA18_7173_001

City: Sutter Creek

Location: Gopher Flat Rd W/O Manor Ct

Date: 5/8/2018



VOLUME

Gopher Flat Rd E/O Golden Hills Dr

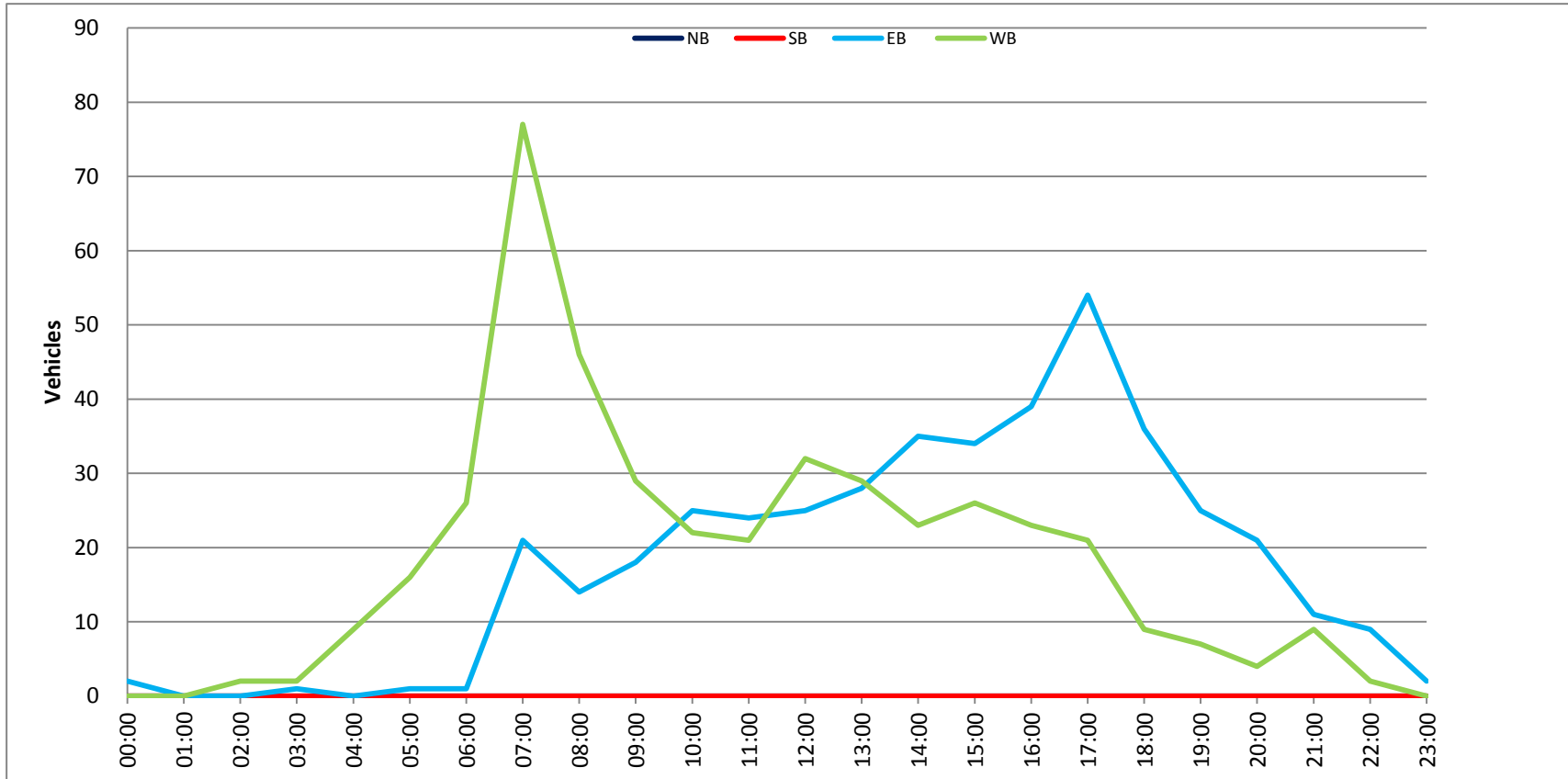
Day: Tuesday
Date: 5/8/2018

City: Sutter Creek
Project #: CA18_7173_002 7643-01

DAILY TOTALS					NB	SB	EB	WB	Total					
					0	0	426	435	861					
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00			1	0	1	12:00			3	7	10			
00:15			0	0	0	12:15			9	12	21			
00:30			1	0	1	12:30			6	6	12			
00:45			0	2	0	12:45			7	25	7	32	14	57
01:00			0	0	0	13:00			9	2	11			
01:15			0	0	0	13:15			6	8	14			
01:30			0	0	0	13:30			8	4	12			
01:45			0	0	0	13:45			5	28	15	29	20	57
02:00			0	0	0	14:00			15	4	19			
02:15			0	0	0	14:15			9	8	17			
02:30			0	1	1	14:30			4	7	11			
02:45			0	1	2	14:45			7	35	4	23	11	58
03:00			0	0	0	15:00			8	13	21			
03:15			1	1	2	15:15			9	6	15			
03:30			0	1	1	15:30			5	5	10			
03:45			0	1	0	15:45			12	34	2	26	14	60
04:00			0	0	0	16:00			8	2	10			
04:15			0	0	0	16:15			9	5	14			
04:30			0	6	6	16:30			5	10	15			
04:45			0	3	9	16:45			17	39	6	23	23	62
05:00			0	5	5	17:00			13	6	19			
05:15			0	4	4	17:15			19	3	22			
05:30			0	2	2	17:30			12	4	16			
05:45			1	1	5	17:45			10	54	8	21	18	75
06:00			0	9	9	18:00			10	3	13			
06:15			1	6	7	18:15			8	2	10			
06:30			0	4	4	18:30			8	4	12			
06:45			0	1	7	18:45			10	36	0	9	10	45
07:00			4	10	14	19:00			5	1	6			
07:15			1	12	13	19:15			9	1	10			
07:30			10	24	34	19:30			5	0	5			
07:45			6	21	31	19:45			6	25	5	7	11	32
08:00			5	15	20	20:00			3	1	4			
08:15			1	9	10	20:15			4	0	4			
08:30			4	12	16	20:30			9	2	11			
08:45			4	14	10	20:45			5	21	1	4	6	25
09:00			2	5	7	21:00			2	6	8			
09:15			5	9	14	21:15			3	2	5			
09:30			3	4	7	21:30			3	1	4			
09:45			8	18	11	21:45			3	11	0	9	3	20
10:00			7	4	11	22:00			2	0	2			
10:15			7	6	13	22:15			2	1	3			
10:30			6	3	9	22:30			3	0	3			
10:45			5	25	9	22:45			2	9	1	2	3	11
11:00			8	6	14	23:00			1	0	1			
11:15			4	5	9	23:15			1	0	1			
11:30			6	4	10	23:30			0	0	0			
11:45			6	24	6	23:45			0	2	0	0	2	
TOTALS			107	250	357	TOTALS			319	185	504			
SPLIT %			30.0%	70.0%	41.5%	SPLIT %			63.3%	36.7%	58.5%			

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	426	435	861

AM Peak Hour	09:45	07:15	07:15	PM Peak Hour	16:45	13:45	16:45				
AM Pk Volume	28	82	104	PM Pk Volume	61	34	80				
Pk Hr Factor	0.875	0.661	0.703	Pk Hr Factor	0.803	0.567	0.870				
7 - 9 Volume	0	0	35	123	158	4 - 6 Volume	0	0	93	44	137
7 - 9 Peak Hour	07:15	07:15	07:15	4 - 6 Peak Hour	16:45	16:15	16:45				
7 - 9 Pk Volume	0	0	22	82	104	4 - 6 Pk Volume	0	0	61	27	80
Pk Hr Factor	0.000	0.000	0.550	0.661	0.703	Pk Hr Factor	0.000	0.000	0.803	0.675	0.870



VOLUME

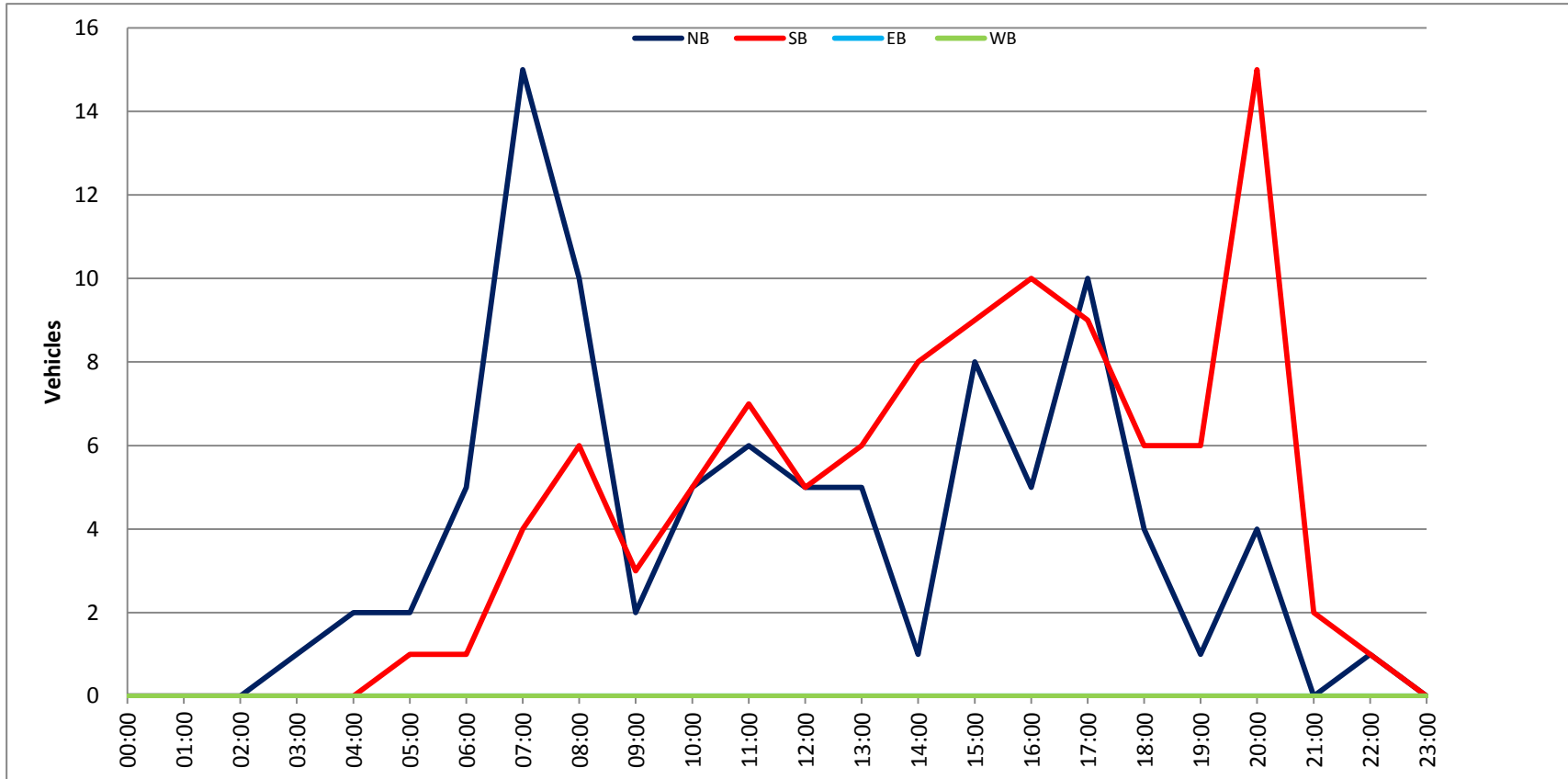
Golden Hills Dr S/O Gopher Flat Rd

Day: Tuesday
Date: 5/8/2018

City: Sutter Creek
Project #: CA18_7173_003 7643-01

DAILY TOTALS					NB	SB	EB	WB	Total		
					92	104	0	0	196		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	0	0			0	12:00	0	1			1
00:15	0	0			0	12:15	0	0			0
00:30	0	0			0	12:30	3	2			5
00:45	0	0			0	12:45	2	5	2	5	4
01:00	0	0			0	13:00	1	2			3
01:15	0	0			0	13:15	1	1			2
01:30	0	0			0	13:30	3	1			4
01:45	0	0			0	13:45	0	5	2	6	2
02:00	0	0			0	14:00	0	3			3
02:15	0	0			0	14:15	1	2			3
02:30	0	0			0	14:30	0	0			0
02:45	0	0			0	14:45	0	1	3	8	3
03:00	0	0			0	15:00	2	0			2
03:15	1	0			1	15:15	1	4			5
03:30	0	0			0	15:30	4	3			7
03:45	0	1	0		0	15:45	1	8	2	9	3
04:00	0	0			0	16:00	0	3			3
04:15	0	0			0	16:15	1	3			4
04:30	0	0			0	16:30	1	3			4
04:45	2	2	0		2	16:45	3	5	1	10	4
05:00	0	0			0	17:00	3	0			3
05:15	0	0			0	17:15	3	4			7
05:30	2	0			2	17:30	2	4			6
05:45	0	2	1	1	1	17:45	2	10	1	9	3
06:00	3	0			3	18:00	1	2			3
06:15	1	0			1	18:15	0	2			2
06:30	0	1			1	18:30	2	0			2
06:45	1	5	0	1	1	18:45	1	4	2	6	3
07:00	0	0			0	19:00	0	1			1
07:15	5	1			6	19:15	0	2			2
07:30	3	1			4	19:30	0	1			1
07:45	7	15	2	4	9	19:45	1	1	2	6	3
08:00	6	2			8	20:00	3	2			5
08:15	1	0			1	20:15	0	4			4
08:30	2	2			4	20:30	1	7			8
08:45	1	10	2	6	3	20:45	0	4	2	15	2
09:00	1	0			1	21:00	0	0			0
09:15	0	1			1	21:15	0	0			0
09:30	1	2			3	21:30	0	2			2
09:45	0	2	0	3	0	21:45	0	0	2		0
10:00	3	0			3	22:00	0	0			0
10:15	1	0			1	22:15	1	1			2
10:30	1	4			5	22:30	0	0			0
10:45	0	5	1	5	1	22:45	0	1	0	1	0
11:00	3	1			4	23:00	0	0			0
11:15	0	0			0	23:15	0	0			0
11:30	1	3			4	23:30	0	0			0
11:45	2	6	3	7	5	23:45	0	0			0
TOTALS	48	27			75	TOTALS	44	77			121
SPLIT %	64.0%	36.0%			38.3%	SPLIT %	36.4%	63.6%			61.7%

DAILY TOTALS					NB	SB	EB	WB	Total
					92	104	0	0	196
AM Peak Hour	07:15	11:00			07:15	16:45	19:45		16:45
AM Pk Volume	21	7			27	11	15		20
Pk Hr Factor	0.750	0.583			0.750	0.917	0.536		0.714
7 - 9 Volume	25	10	0	0	35	15	19	0	0
7 - 9 Peak Hour	07:15	07:15			07:15	16:45	16:00		
7 - 9 Pk Volume	21	6	0	0	27	11	10	0	0
Pk Hr Factor	0.750	0.750	0.000	0.000	0.750	0.917	0.833	0.000	0.000



VOLUME

Sutter Creek Rd W/O Hillside Dr

Day: Tuesday
Date: 5/8/2018

City: Sutter Creek
Project #: CA18_7173_004 7643-01

DAILY TOTALS					NB	SB	EB	WB	Total					
					0	0	769	755	1,524					
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00			0	1	1	12:00			7	7	14			
00:15			2	2	4	12:15			11	15	26			
00:30			1	0	1	12:30			11	8	19			
00:45			1	4	0	3	12:45		18	47	10	40	28	87
01:00			0	0	0	13:00			14	10	24			
01:15			0	0	0	13:15			10	17	27			
01:30			0	2	2	13:30			8	5	13			
01:45			0	0	2	13:45			10	42	11	43	21	85
02:00			0	0	0	14:00			19	11	30			
02:15			1	0	1	14:15			19	11	30			
02:30			0	1	1	14:30			17	13	30			
02:45			1	2	0	1	14:45		14	69	9	44	23	113
03:00			0	0	0	15:00			25	15	40			
03:15			0	0	0	15:15			17	16	33			
03:30			0	0	0	15:30			22	10	32			
03:45			0	3	3	15:45			21	85	11	52	32	137
04:00			0	2	2	16:00			24	8	32			
04:15			1	7	8	16:15			21	7	28			
04:30			0	3	3	16:30			13	8	21			
04:45			1	2	7	19	16:45		26	84	16	39	42	123
05:00			1	2	3	17:00			16	11	27			
05:15			0	4	4	17:15			27	11	38			
05:30			0	16	16	17:30			20	8	28			
05:45			1	2	5	27	17:45		18	81	10	40	28	121
06:00			1	6	7	18:00			13	11	24			
06:15			2	16	18	18:15			14	8	22			
06:30			2	15	17	18:30			10	5	15			
06:45			5	10	14	51	18:45		9	46	4	28	13	74
07:00			2	24	26	19:00			9	1	10			
07:15			3	12	15	19:15			15	4	19			
07:30			6	23	29	19:30			15	2	17			
07:45			7	18	31	90	19:45		6	45	3	10	9	55
08:00			3	14	17	20:00			7	3	10			
08:15			9	22	31	20:15			7	5	12			
08:30			5	16	21	20:30			3	4	7			
08:45			15	32	18	70	20:45		8	25	2	14	10	39
09:00			10	14	24	21:00			6	2	8			
09:15			11	16	27	21:15			10	1	11			
09:30			11	16	27	21:30			3	1	4			
09:45			10	42	23	69	21:45		1	20	1	5	2	25
10:00			5	14	19	22:00			2	1	3			
10:15			11	14	25	22:15			5	0	5			
10:30			7	15	22	22:30			3	1	4			
10:45			19	42	14	57	22:45		2	12	1	3	3	15
11:00			9	12	21	23:00			1	0	1			
11:15			21	13	34	23:15			4	2	6			
11:30			12	8	20	23:30			2	0	2			
11:45			10	52	9	42	23:45		0	7	1	3	1	10
TOTALS			206	434	640	TOTALS			563	321	884			
SPLIT %			32.2%	67.8%	42.0%	SPLIT %			63.7%	36.3%	58.0%			

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	769	755	1,524

AM Peak Hour	10:45	07:00	07:30	PM Peak Hour	16:45	14:30	15:00				
AM Pk Volume	61	90	115	PM Pk Volume	89	53	137				
Pk Hr Factor	0.726	0.726	0.757	Pk Hr Factor	0.824	0.828	0.856				
7 - 9 Volume	0	0	50	160	210	4 - 6 Volume	0	0	165	79	244
7 - 9 Peak Hour	08:00	07:00	07:30	4 - 6 Peak Hour	16:45	16:30	16:45				
7 - 9 Pk Volume	0	0	32	90	115	4 - 6 Pk Volume	0	0	89	46	135
Pk Hr Factor	0.000	0.000	0.533	0.726	0.757	Pk Hr Factor	0.000	0.000	0.824	0.719	0.804



VOLUME

Sutter Creek Rd E/O Locust Ln

Day: Tuesday
Date: 5/8/2018

City: Sutter Creek
Project #: CA18_7173_005 7643-01

DAILY TOTALS					NB	SB	EB	WB	Total		
					0	0	704	707	1,411		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	2	2	12:00			6	8	14
00:15			1	1	2	12:15			10	13	23
00:30			1	0	1	12:30			9	8	17
00:45			1	3	0	12:45			18	43	27
					3				9	38	81
01:00			0	0	0	13:00			11	8	19
01:15			0	1	1	13:15			11	15	26
01:30			0	1	1	13:30			6	7	13
01:45			0	0	0	13:45			8	36	18
					2				10	40	76
02:00			0	0	0	14:00			18	9	27
02:15			1	0	1	14:15			18	9	27
02:30			0	1	1	14:30			17	11	28
02:45			1	2	0	14:45			14	67	23
					1				9	38	105
03:00			0	0	0	15:00			22	15	37
03:15			0	0	0	15:15			14	14	28
03:30			0	0	0	15:30			20	9	29
03:45			0	3	3	15:45			21	77	32
					3				11	49	126
04:00			0	2	2	16:00			21	8	29
04:15			1	7	8	16:15			19	5	24
04:30			0	3	3	16:30			14	7	21
04:45			1	2	5	16:45			24	78	39
					17				15	35	113
05:00			0	2	2	17:00			14	9	23
05:15			0	4	4	17:15			27	10	37
05:30			0	17	17	17:30			19	4	23
05:45			1	1	7	17:45			15	75	25
					30				10	33	108
06:00			1	6	7	18:00			11	10	21
06:15			2	17	19	18:15			14	6	20
06:30			2	14	16	18:30			9	5	14
06:45			5	10	13	18:45			10	44	14
					50				4	25	69
07:00			2	22	24	19:00			8	1	9
07:15			3	11	14	19:15			14	3	17
07:30			3	26	29	19:30			13	3	16
07:45			7	15	27	19:45			7	42	10
					86				3	10	52
08:00			3	13	16	20:00			6	3	9
08:15			7	21	28	20:15			6	4	10
08:30			5	16	21	20:30			2	4	6
08:45			15	30	16	20:45			7	21	9
					66				2	13	34
09:00			10	14	24	21:00			5	2	7
09:15			9	15	24	21:15			8	1	9
09:30			11	14	25	21:30			2	1	3
09:45			8	38	24	21:45			1	16	2
					67				1	5	21
10:00			3	12	15	22:00			2	1	3
10:15			10	13	23	22:15			5	0	5
10:30			5	14	19	22:30			3	1	4
10:45			17	35	11	22:45			2	12	3
					50				1	3	15
11:00			8	12	20	23:00			0	0	0
11:15			19	12	31	23:15			5	2	7
11:30			13	7	20	23:30			2	0	2
11:45			10	50	9	23:45			0	7	1
					40				1	3	10
TOTALS			186	415	601	TOTALS			518	292	810
SPLIT %			30.9%	69.1%	42.6%	SPLIT %			64.0%	36.0%	57.4%

DAILY TOTALS					NB	SB	EB	WB	Total
					0	0	704	707	1,411

AM Peak Hour	10:45	07:30	07:30	PM Peak Hour	16:45	14:30	15:00				
AM Pk Volume	57	87	107	PM Pk Volume	84	49	126				
Pk Hr Factor	0.750	0.806	0.787	Pk Hr Factor	0.778	0.817	0.851				
7 - 9 Volume	0	0	45	152	197	4 - 6 Volume	0	0	153	68	221
7 - 9 Peak Hour	08:00	07:30	07:30	4 - 6 Peak Hour	16:45	16:30	16:45				
7 - 9 Pk Volume	0	0	30	87	107	4 - 6 Pk Volume	0	0	84	41	122
Pk Hr Factor	0.000	0.000	0.500	0.806	0.787	Pk Hr Factor	0.000	0.000	0.778	0.683	0.782

